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1/16/1986

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PIER 91 Facility
WAD000812917

~~1. Martha R~~ 4a
2. Andy B.
3. File: RCRA
lemp
(facility)

Chemical Processors, Inc..

Compliance Inspection Report
for January, 16, 1986

USEPA RCRA



3012777



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

4350 - 150th Ave. N.E. • Redmond, Washington 98052-5301 • (206) 885-1900

May 14, 1986

Mr. Ronald S. West, President
Chemical Processors, Inc.
Pier 91 facility
5501 Airport Way South
Seattle, Washington 98108

Re: WAD000812917

Dear Mr. West:

This letter is to confirm the Resource Conservation and Recovery Act compliance inspection of the Pier 91 facility on January 16, 1986.

With me on the inspection was Mr. Dan Cargill of the Department's Elliott Bay study team. We met at your company's main office to go over the purpose of the inspection and went over questions concerning procedure. Mr. Dennis Stefani, Ms. Jeanne Van Wallendael, Mr. Rick Morton of your staff and a representative from The Boeing Company accompanied Mr. Cargill and me to the Pier 91 facility after the meeting.

The following are some non-compliance issues that need to be addressed:

1. A revised Notification Form 2 and a revised Part A application addressing the addition of WTO2 wastes and with the thought of placing the list in section 9903 on the form and in the application (WAC 173-303-060).
2. A revised Closure Plan with the thought of closing within the present month (WAC 173-303-610).

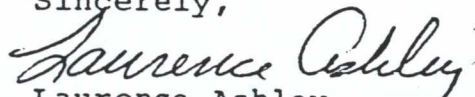
Mr. Ronald S. West, President
Chemical Processors, Inc.
May 14, 1986
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3. A revised waste analysis plan stressing the way the company determines that the waste listed on manifest is the waste received; the method of handling the waste; and how it is determined for the waste to be disposed of (WAC 173-303-300).

These items were discussed at the debriefing meeting at the facility.

If you have any questions, please call me at 885-1900.

Sincerely,


Laurence Ashley
RCRA-Ecology Inspector
Environmental Quality

LA/gm

cc Ross Potter

DANGEROUS WASTE COMPLIANCE CHECKLIST/QUESTIONNAIRE, CHAPTER 173-303 WAC

PART I: COVER INFORMATION

This part of the checklist/questionnaire is applicable to all persons who handle dangerous waste. This cover information includes a review of the Notification Form and confirmation of other general information necessary to maintain accurate files and records.

1. INSPECTOR INFORMATION

WDOE Inspector: Laurence Ashley Phone #: (206) 885-1900

Inspector's Signature: Laurence Ashley

Office (circle one): NW SW C E IND

Date of THIS Inspection: January 16, 1986

Date of LAST Inspection: April 9, 1985

Other Inspectors Present:

Name: Dan Cargill Agency: Ecology Phone #: (206) 885-1900

2. BUSINESS INFORMATION

Business Name: Chemical Processors, Inc. EPA/State ID #: WAD0000812917

Address: Pier 91
Seattle

Zip Code: 98108 County: King

Business Location (If:)

Other Than Address)

Contact Person: Dennis Stefani Phone #: 767-0350

Business Representatives Present During Inspection:

Name: Bob Moody Title: Plant Manager Phone #: (206) 284-2450
: Dennis Stefani : Manager RCRA compliance : 767-0350
: A. Jeanne Van Wallendael : RCRA Compliance officer : 767-0350

3. NOTIFICATION FORM REVIEW

Notification Form Filed: Yes ☒ No ☐ Date: August 13, 1980

Notification Form Revisions: Yes ☒ No ☐ Date: May 1, 1984

Date: December 7, 1984

Date: _____

Is the information provided in the most recent Notification Form still accurate? (If not, note any deficiencies in Comments, below.)

Yes ☐
No ☒

Comments:

The facility has been receiving
WTO2 wastes - Are now in process of
revising Part A to include WTO2 and
other types of wastes.

4. ADDITIONAL INSPECTION INFORMATION

Time Inspector Entered Site: 0900

Left Site: 1230

Were photographs taken during the inspection? Yes ☒
No ☐

If yes, how many? Five

(Note: A brief description of the pictures should be prepared and included in the inspection report.)

Were any problems encountered regarding:

Permission to enter the site: None

Permission to have access to any areas on the site: _____

Permission to have access to any records: _____

Other: _____

Were samples taken during the inspection? Yes ☐
No ☒

If yes, where and of what were samples taken:

Were samples split with the owner/operator? Yes ☐
No ☐
Were chain of custody procedures follows? Yes ☐
No ☐

DANGEROUS WASTE COMPLIANCE CHECKLIST/QUESTIONNAIRE, CHAPTER 173-303 WAC

PART II: GENERATORS

This part of the checklist/questionnaire is applicable to any person whose actions or processes generate dangerous wastes, and are thus identified as generators under Chapter 173-303 WAC. This part of the checklist/questionnaire must be completed for any person who is a generator, including transporters or TSD facilities which generated dangerous waste.

Generator Name: Chemical Processors - Pier 91 EPA/State ID #: WAD000812917

Inspectors Name: Laurence Ashley Date: January 16, 1986

Has this generator generated dangerous waste since the date of his last inspection, or since the date he was determined to be a generator if this is his first inspection? (If "No," explain how the generator assures that no dangerous wastes are generated in the Comments section, below, and do not complete the remainder of this part of this checklist/questionnaire.)

Yes ☒

No ☐

Comments:

The facility is manufacturing the oily
sludge after centrifugation and dewatering,
as used WTOR
AD

1. DESIGNATION (WAC -170(1)).

Yes No

A. Does the generator properly designate his dangerous wastes as DW and/or EHW?

☒ ☐

B. Does the generator have adequate information to perform these designations?

☒ ☐

C. If designation involves performing tests and analyses of his wastes:

a. Does the generator have on-site, or have ready access to, equipment for obtaining and preserving waste samples for tests?

☒ ☐

-

✓

Yes No

- ✓



- | | |
|-------------------------|-----------------------|
| <u>Transporter Name</u> | <u>EPA/State ID #</u> |
| Resource Recovery Corp | WAD061672812 |

Comments _____

3. MANIFESTS (WAC -180).

Yes No

A. Does the generator retain a completed copy of each manifest signed by the initial transporter for at least three years, or until he receives a signed copy from the designated facility indicating receipt of the waste which copy he keeps for at least three years from the date the initial transporter accepted the waste (WAC 210(1))?

☒ ☐

B.a Does the generator use an alternative manifest mechanism for moderate risk wastes as provided in WAC -170(4)(a)?

☐ ☒

b. Has this alternative manifest mechanism been approved by WDOE?

☐ ☐

c. Has the generator complied with the terms and conditions of, and properly implemented the alternative manifest mechanism? (If not, specify what failures occurred under Comments, below.)

☐ ☐

Note: If all of the dangerous wastes handled by the generator are moderate risk wastes covered by an alternative manifest mechanism, then complete only items G., H., I., and J., below. If only some of the generator's dangerous wastes are moderate risk wastes covered by an alternative manifest mechanism, then do complete all remaining items, below.

C. Does the generator use the Uniform Manifest (WAC -180(1)(b))?

☒ ☐

Does the generator include the additional WDOE information required for the Uniform Manifest:

a. In Item D - the first transporter's telephone number (WAC -180(1)(b)(i))?

☒ ☐

b. In Item F - the second transporter's telephone number, if a second transporter is used (WAC -180(1)(b)(ii))?

☒ ☐

c. In Item H - the designated receiving facility's telephone number (WAC -180(1)(b)(iii))?

☒ ☐

d. In Item I - the dangerous waste number for each corresponding waste entered and described under Item 11 (WAC -180(1)(b)(iv))?

☒ ☐

D. Is signature of, and date of acceptance by the transporter obtained prior to transport (WAC -180(3)(a))?

✓

E. Does the generator retain one copy, signed by the transporter, and give remaining copies to the transporter at time of transport (WAC -180(3)(a) and (b))?

✓

F. Has the generator received copies of all his manifests, signed, dated, and returned by the receiving TSD facilities?

✓

Were all of these received within forty-five days after the waste was transported? (If "Yes," do not complete the next item, G., regarding Exception Reports.)

✓

G.a. If the generator does not receive a copy of the manifest with the handwritten signature of the designated facility's owner/operator within thirty-five days after the initial transporter accepted the waste, does he contact the transporter(s) and/or facility to determine the status of the dangerous waste shipment (WAC -220(2)(a))?

✓ N/A

b. Has the generator submitted in writing to WDOE an Exception Report for each manifest not signed, dated, and returned by the receiving TSD facility within forty-five days of transport (WAC -220(2))?

N/A

c. List the dates during the previous year that Exception Reports were submitted: _____

d. Were the waste shipments described in these Exception Reports finally delivered to a TSD facility?
If not, specify which shipments were not delivered or not found:

e. Does the generator retain copies of all Exception Reports for a minimum of three years (WAC -210(2))?

H. If the transporter is unable to deliver the dangerous waste shipment to either the designated or alternate facility, does the generator either designate another facility for delivery or instruct that the shipment be returned to him when contacted by the transporter for further instructions (WAC -180(3)(c))?

✓

- I. When shipping dangerous waste within the United States solely by water (bulk shipment), does the generator send three copies of the manifest signed and dated by himself and the initial transporter to either the owner/operator of the designated facility, or to the last water transporter to handle the waste in the U.S. if the waste is exported by water (WAC -180(3)(d))?
- J. For rail shipments within the United States which originate at the site of generation, does the generator send at least three copies of the manifest signed and dated by himself and the initial transporter to either (WAC -180(3)(e)):
- The next nonrail transporter, if any?
 - The designated facility if transported solely by rail?
 - The last rail transporter to handle the waste in the U.S. if exported by rail?

Comments _____

4. PREPARING DANGEROUS WASTE FOR TRANSPORT OFF-SITE (WAC -190).

- | | <u>Yes</u> | <u>No</u> |
|---|-------------------------------------|--------------------------|
| A. Does the generator package his dangerous waste for transport in accordance with U.S. DOT rules, 49 CFR Parts 173, 178 and 179 (WAC -190(1))? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| B. Does the generator label and mark each of his packages for shipment in accordance with U.S. DOT rules, 49 CFR Part 172 (WAC -190(2) and (3)(a))? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| C. Does the generator mark each package containing 110 gallons or less of dangerous waste, and display in accordance with 49 CFR 172.304, the following or equivalent words and information (WAC -190(3)(b)):
HAZARDOUS WASTE - State and Federal Law Prohibits Improper Disposal. If found, contact the nearest | | |

police or public safety authority, and the Washington State Department of Ecology or the United States Environmental Protection Agency.

Generator's Name and Address _____

Manifest Document Number _____

- D. Does the generator placard, or offer to the transporter all appropriate placards, in accordance with U.S. DOT rules 49 CFR Part 172 Subpart F (WAC -190(4))?

Comments _____

5. IMPORT/EXPORT OF DANGEROUS WASTE (WAC -230).

Yes No

- A. Does the generator import or export any dangerous waste? (If "No," skip the remainder of the questions in this item.)

- B. If the generator exports dangerous waste to other countries, does he:

- a. Notify EPA in writing, four weeks before shipping to each country in each calendar year, of the waste's identification number and DOT description, and of the name and address of the foreign consignee (40 CFR 262.50 (b)(1))?
- b. Require the foreign consignee to confirm delivery of the waste in the foreign county (40 CFR 262.50(b)(2))?
- c. Meet the Uniform Manifest requirements (including additional WDOE information), except that he uses the name and address of the foreign consignee in place of the designated facility's, and he identifies the point of departure from the United States (40 CFR 262.50(b)(3))?
- d. File an Exception Report with EPA if he has not received either:
 - i. A copy of the manifest signed by the transporter stating the date and place of departure from the United States within 45 days (40 CFR 262.50(c)(1))?

ii. Written confirmation from the foreign consignee that the waste was received within 90 days (40 CFR 262.50(c)(2))?

e. Submit copies of Exception Reports sent to EPA to WDOE as well (WAC -230(1)(b))?

C. If the generator imports waste from foreign countries, does he:

a. Comply with all other requirements for generators (WAC -230(2))?

b. Comply with the Uniform Manifest requirements (including additional WDOE information), except that in place of the generator's name, address, and ID # he enters the name and address of the foreign generator and the importer and the importer's ID #, and in place of the generator's signature on the certification the importer or his agent signs and dates the certification and obtains the transporter's signature (WAC -230(2)(b))?

Comments _____

G. TRIPLE RINSING (WAC -230(3), (4) AND -160).

Yes No

A. Does the generator triple rinse all containers which are empty and which held EHW in accordance with WAC -160?

☒ ☐

B. Does the generator either reuse rinsate from any rinsing operations (including rinsing of tote tanks, truck or railroad tank cars, WAC -230(4)) in a manner consistent with the original product, or else determine if the rinsate is designated as dangerous waste and, if so designated, handle it in accordance with Chapter 173-303 WAC and Chapter 90.48 RCW?

☒ ☐

Comments _____

7. NON-PERMITTED SPILLS AND DISCHARGES (WAC -145).

Yes No

- A. Have there been any nonpermitted spills or discharges on the generator's site which have not been reported to WDOE?

— ✓

If yes, describe what wastes were spilled and approximately what quantities:

- B. If the generator has any nonpermitted spill or discharge to ground or to surface or ground waters, does he:

- a. Notify the appropriate regional office of WDOE (WAC -145(2)(a))?

✓ —

- b. Notify all local authorities in accordance with the local emergency plan (if necessary, by checking with the local emergency service coordinator and fire department to determine notification responsibilities under the plan) (WAC -145(2)(a))?

✓ —

- C. If the generator has any nonpermitted spill or discharge which results in emissions to the air, does he:

- a. Notify the local air pollution control authority if the spill or discharge is in western Washington (WAC -270(2)(b))?

✓ —

- b. Notify the appropriate regional office of WDOE if the spill or discharge is in eastern Washington (WAC -270(b))?

✓ —

- c. Notify all local authorities in accordance with the local emergency plan (if necessary, by checking with the local emergency service coordinator and fire department to determine notification responsibilities under the plan) (WAC -270(2)(b))?

✓ —

- D. When the generator has any nonpermitted spill or discharge, does he:

- a. Take appropriate immediate action to protect human health and the environment (WAC -145(3))?

✓ —

- b. Whenever required by WDOE:

- i. Clean up all released wastes or take such other actions as may be required or approved by federal, state, or local officials acting within their responsibilities (WAC -145(3)(a)(i))? ☒
- ii. Designate and treat, store, or dispose of all soils, waters or other materials contaminated by the spill or discharge (WAC -145(3)(a)(ii))? ☒
- iii. Restore the area impacted by the spill or discharge and replenish resources, if the impacted property is not owned by the generator (WAC -145(3)(a)(iii))? ☒

Comments _____

8. ANNUAL REPORTS

Yes No

- A. Does the generator retain copies of Annual Reports for a minimum of three years (WAC -210(2))? ☒
- B. Is the generator generating any wastes which were not reported on his latest Annual Report and which should have been reported? ☒

If "Yes," describe these wastes:

<u>Description/Dangerous Waste #</u>	<u>EHW/DW</u>	<u>Quantity (Month/Batch)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

C. Are there any wastes which were reported on his latest Annual Report which the generator is no longer generating? ✓

If "yes," provide the waste description and Dangerous Waste # as they appeared on the latest Annual Report:

Comments

The facility is manifesting oily sludge
as ~~W001~~ WJ02

9. ADDITIONAL REPORTS.

Yes No

Does the department require the generator to submit any additional reports as provided under WAC -220(3)? ✓

If "Yes," were these reports accurate and submitted in a timely manner? (Specify what additional reports are required and note any deficiencies under Comments, below.)

Comments _____

10. GENERATOR ACCUMULATION (WAC -200).

This portion of the generator checklist/questionnaire is only applicable to generators who accumulate dangerous waste on-site as allowed for in WAC -200. To determine whether or not this portion is applicable, first complete item A., below. If, after completing item A., it is determined that the generator does accumulate dangerous waste on-site, then complete all of the questions under this Section 10. Generator Accumulation. If, after completing item A., it is determined that the generator does not accumulate dangerous wastes, then do not complete the remaining questions under this section 10. Generator Accumulation. (Note: Under certain circumstances, WAC -200(1)(e)(ii) allows an accumulating generator who keeps his waste less than ten days to be exempt from all or part of sections WAC -330 through -360. If this is the case for this generator, then complete only item A. and the remaining applicable items of this section 10. Generator Accumulation.)

A. Determining Whether Or Not The Generator's Accumulation
Is Subject To WAC -200.

Yes No

a. If the answers to both of the following questions are "Yes," then do not complete the remaining generator accumulation questions (they will be asked later under Part IV: Facilities). If either or both questions are answered "No," then continue the remaining questions in this item A.

i. Does the generator operate an on-site dangerous waste management facility?

☒

ii. Are all of the generator's dangerous wastes placed in and managed (including stored, treated or disposed) at his on-site facility as soon as they become subject to regulation?

☒

b. If the answer to any of the following questions is "Yes," then the generator is subject to the generator accumulation standards of WAC -200, and the remaining items of this section 10. Generator Accumulation must be completed. If the answer to all of the following questions is "No," then the generator is not subject to WAC -200.

i. Does the generator ever generate more than 2,200 lbs. (1,000 kg) of dangerous waste in a month or batch, or ever accumulate more than 2,200 lbs. (1,000 kg) on-site at any time?

☐

ii. Does the generator ever generate (per month or per batch) or accumulate on-site at anytime more than 2.2 lbs. (1.0 kg) of EHW discarded chemical products (WAC -081)?

☐

iii. Does the generator ever hold dangerous wastes on-site for more than ten days after the date the waste quantity first exceeds the applicable quantity exclusion limit?

iv. Even though the generator removes all wastes in less than ten days, has he been required by WDOE to comply with some or all of WAC -330 through -360?

Comments _____

B. Ninety-Day* Accumulation Limit.

Yes No

* The time limit is one hundred eighty days for moderate risk wastes held in containers or tanks as allowed by WAC -170(4)(b).

a. Does the generator ship all wastes off-site to, or place them on-site in, a facility permitted (including interim status or permit-by-rule) to manage dangerous wastes within ninety days* or less (WAC -200(1)(a))?

b. In those cases where wastes were not sent to a facility within ninety days*, did WDOE grant extensions (maximum thirty days) as allowed by WAC -200(1)(a)?

c. How does the generator determine when the ninety-day* accumulation period begins:

i. When the waste is first generated (WAC -200(2)(a))?

ii. If he is a small quantity generator, when his aggregated quantity first exceeds the exclusion limit (WAC -200(2)(b))?

iii. When each container is full (WAC -200(2)(c))?
(Note: This method may not be used if on-site waste quantity ever exceeds 2,200 pounds before the container is full, or any on-site wastes are EHW discarded chemical products.)

Comments _____

- | | <u>Yes</u> | <u>No</u> |
|---|-------------------------------------|--------------------------|
| C. Personnel Training (WAC -330). | | |
| a. Does the generator have a written personnel training plan, kept at the generator's site (WAC -330(2))? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Does the personnel training plan include the following documents and records: | | |
| i. For each position related to the handling of dangerous waste on-site, the job title, name of employee filling each job, and the job description, including requisite skills, education, qualifications and duties for each position (WAC -330(2)(a))? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| ii. Written description of type and amount of introductory and continuing training needed for each position (WAC -330(2)(b))? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| iii. Records documenting that employees have received and completed the necessary training (WAC -330(2)(c))? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Are training records retained for at least three years after an employee last worked for the generator, or until the generator closes his site, whichever occurs first (WAC -330(3))? (Note: Records may have been transferred within the company to follow an employee. This is permissible, but some record of the employee's transfer and continued employment should be documented.) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. Does the generator provide a training program that teaches personnel to perform their duties in ways that ensures the generator's compliance with WAC 173-303 (WAC -330(1))? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. Does the training program involve: | | |
| Classroom instruction? | <input checked="" type="checkbox"/> | |
| On-the-job training? | <input checked="" type="checkbox"/> | |
| f. Is the training program directed by a person knowledgeable in dangerous waste handling practices (WAC -330(1)(a))? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

- g. Do the generator's employees participate in an annual review of the training provided in the training program (WAC -330(1)(b))? ✓

- h. Is the training program successfully completed by each employee within six months of being employed at the generator's site, or of being assigned to a new position, whichever is later (WAC -330(1)(c))? ✓

- i. Are new employees supervised until they complete the training program (WAC -330(1)(c))? ✓

- j. Does the training program:
 - i. Include training relevant to the positions in which personnel are employed (WAC -330(1)(a))? ✓

 - ii. Instruct personnel on contingency plan implementation (WAC -330(1))? ✓

 - iii. Familiarize personnel with emergency equipment and systems, and emergency procedures (WAC -330(1)(d))? ✓

- k. Where applicable, does the training program include the following parameters (WAC -330(1)(d))?
 - i. Procedures for using, inspecting, repairing and replacing emergency and monitoring equipment. ✓

 - ii. Key parameters for automatic waste feed cut-off systems. ✓

 - iii. Communications or alarm systems. ✓

 - iv. Response to fires or explosions. ✓

 - v. Response to ground water contamination. ✓

 - vi. Shutdown of operations. ✓

Comments: _____

D. Preparedness and Prevention (WAC -340).

Yes No

- a. Is each container and tank used for accumulation labeled or marked with the words "Dangerous Waste" or "Hazardous Waste," and with a label or sign which identifies for employees, emergency response personnel and the public the major risk(s) associated with the waste in the container or tank (WAC -200(1)(e))?

☒

- b. Unless it can be demonstrated that the equipment is not necessary (specify why not in the Comments, below), or the equipment is not required because wastes are held less than ten days (as allowed by WAC -200(1)(e)), are the following equipment present, tested regularly, and kept in good working order:

- i. Internal communications or alarm system capable of providing immediate emergency instructions (WAC -340(1)(a))?

Present?

Tested regularly?

Good working order?

☒
☒
☒

- ii. A device capable of summoning police or fire departments or emergency response teams (e.g., telephone, two-way radio) (WAC -340(1)(b))?

Present?

Tested regularly?

Good working order?

☒
☒
☒

- iii. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment (WAC -340(1)(c))?

Present?

Tested regularly?

Good working order?

☒
☒
☒

- iv. Water at adequate volume/pressure to supply hose streams, foam equipment, sprinklers or spray systems (WAC -340(1)(d))?

Present?

Tested regularly?

Good working order?

☒
☒
☒

- c. Whenever dangerous waste is being handled, do all personnel involved have immediate access to an internal alarm or emergency communication system, either directly or through visual or voice contact with another employee (WAC -340(2)(a))?

☒

- d. If there is ever just one employee present on the premises, does he have immediate access to a device (e.g., telephone, two-way radio) capable of summoning external emergency help (WAC -340(2)(b))? ✓ —
- e. Is adequate aisle space provided to allow for inspections and unobstructed movement of personnel, fire and spill control equipment and decontamination equipment during an emergency (WAC -340(3))? ✓ —
- f. Do the hazards posed by the wastes handled by the generator require arrangements with local authorities? (If "Yes," complete the remaining questions, g. through k, below. If "No," document under Comments, below, why the hazards are not such as to warrant these arrangements.) ✓ —
- g. Has the generator arranged to familiarize police, fire departments and emergency response teams with: the layout of his site; properties of wastes handled and associated hazards; places where personnel would normally be working; entrances to and roads on the site; and possible evacuation routes (WAC -340(4)(a))? ✓ —
- h. Has the generator arranged to familiarize local hospitals with the properties of dangerous wastes handled and the types of injuries or illnesses which could result from fires, explosions or waste releases (WAC -340(4)(b))? ✓ —
- i. Does the generator have agreements with state emergency response teams, emergency response contractors and equipment suppliers (WAC -340(4)(c))? ✓ —
- j. Where more than one party might respond to an emergency, does the generator have agreements designating primary emergency authority and support services to be provided (WAC -340(4)(d))? ✓ —
- k. Has the generator documented all instances where state or local authorities have declined to enter into the above arrangements (WAC -340(5))? ✓ —

Comments

Item f. - when flammable wastes
except oily wastes - come to the
facility, only by ok from fire department.
file

E. Contingency Plan, Emergency Procedures and Emergencies
(WAC -350 and -360).

Yes No

- a. Does the generator have a contingency plan designed to lessen the potential impacts of a fire, explosion or unplanned sudden or nonsudden release of dangerous wastes or dangerous waste constituents to air, soil, surface or ground water (WAC -350(1))?
- b. Does the generator have a Spill Prevention Control and Countermeasures (SPCC) plan amended to include a contingency plan (WAC -350(2))?
- c. Are copies of the contingency plan and revisions to it:
- i. Maintained at the generator's site (WAC -350(4)(a))?
- ii. Submitted to all local police departments, fire departments, and hospitals, and state and local emergency response teams that may provide emergency services (WAC -350(4)(b))?
- d. Is the contingency plan amended whenever:
- i. Applicable regulations are revised (WAC -350(5)(a))?
- ii. The plan fails in an emergency (WAC -350(5)(b))?
- iii. The generator's site changes in a way that increases the potential for fires, explosions, or releases, or that changes the necessary emergency responses (WAC -350(5)(c))?
- iv. The list of emergency coordinators changes (WAC -350(5)(d))?
- v. The list of emergency equipment changes (WAC -350(5)(e))?
- e. Does the contingency plan include:
- i. A description of the actions personnel must take in the event of an emergency circumstance (WAC -350(3)(a))?
- ii. A description of the arrangements agreed to by local police and fire departments, hospitals, contractors, and state and local response teams to coordinate emergency services (WAC -350(3)(c))?

- iii. A current list of emergency coordinators, including names, addresses and twenty-four hour phone numbers (WAC -350(3)(d))? ✓
- iv. If more than one emergency coordinator is listed, identification of a primary emergency coordinator, with the others listed in the order that they will assume responsibility as alternates (WAC -350(3)(d))? ✓
- v. A list of all emergency equipment kept on the site, including the location, physical description and brief outline of the capability of each piece of equipment (WAC -350(3)(e))? ✓
- vi. An evacuation plan (where evacuation could be necessary) for personnel, which describes signals to begin evacuation, evacuation routes, and alternate routes (WAC -350(3)(f))? ✓
- f. Do the information and elements described in the contingency plan assure that the generator has taken adequate precautions for reacting to emergency circumstances? (If "No," specify what inadequacies exist in the Comments section, below.) ✓
- g. Is an emergency coordinator on the premises at all times or available on-call at all times (WAC -360(1))? ✓
- h. Is the emergency coordinator (and his alternates, if any) capable in the following areas (WAC -360(1)):
- i. Familiar with all aspects of the contingency plan? ✓
 - ii. Familiar with all operations and activities on the generator's site? ✓
 - iii. Familiar with the location and properties of all wastes handled? ✓
 - iv. Familiar with the location of all records kept on-site? ✓
 - v. Familiar with the generator's site layout? ✓
 - vi. Has the authority to commit the resources needed to carry out the contingency plan? ✓
- i. Are the following procedures implemented (or, to be implemented) in the event of an emergency:

- i. Does the emergency coordinator or his designee (EC/D) immediately activate internal alarms or communication systems to notify all personnel (WAC -360(2)(a)(i)) and notify appropriate state or local agencies with designated response roles if help is needed (WAC -360(2)(a)(ii))?
- ii. Does the EC/D immediately identify the character, exact source, amount and areal extent of any released materials (WAC -360(2)(b))?
- iii. Concurrently, does the EC/D assess possible hazards to human health and the environment (including direct, indirect, immediate and long-term effects) that may result from the emergency (WAC -360(2)(c))?
- iv. If the EC/D determines that the emergency could threaten human health or the environment outside the facility, does he immediately notify and provide an assessment report (which must include the information described under v., below) to:
1. The appropriate local authorities if evacuation of local areas may be advisable; and remain available to help appropriate officials decide if local areas should be evacuated (WAC -360(2)(d)(i))?
2. WDOE and either the government official designated as on-the-scene coordinator, or the National Response Center (WAC -360(2)(d)(ii))?
- v. Does the assessment report (covered under iv., above) include:
1. Name and telephone number of reporter (WAC -360(2)(e)(i))?
2. Name and address of the generator's site (WAC -360(2)(e)(ii))?
3. Time and type of emergency (e.g., fire, release) (WAC -360(2)(e)(iii))?
4. Name and quantity of materials involved (WAC -360(2)(e)(iv))?
5. The extent of injuries, if any (WAC -360(2)(e)(v))?

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

6. Possible hazards to human health and the environment off the site (WAC -360(2)(e)(vi))?
- vi. During an emergency, does the EC/D take all measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other dangerous wastes (e.g., stopping processes or operations, collecting and containing releases, removing or isolating containers, etc.) (WAC -360(2)(f))?
- vii. If operations stop in response to an emergency, does the EC/D monitor for leaks, pressure buildup, gas generation or ruptures wherever appropriate (WAC -360(2)(g))?
- viii. Immediately after an emergency, does the EC/D provide for treating, storing or disposing wastes and materials resulting from the emergency (WAC -360(2)(h))?
- ix. Does the EC/D ensure, in the affected areas on the site, that:
1. No waste that may be incompatible with the released material is treated, stored or disposed until cleanup procedures are completed (WAC -360(2)(i)(i))?
 2. All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations resume (WAC -360(2)(i)(ii))?
- x. Does the generator notify WDOE, and appropriate local authorities, that his site satisfies the conditions described under ix.1. and 2., above, before operations resume in the affected areas of his site (WAC -360(2)(j))?
- xi. Does the generator note in his operating record the time, date, and details of incidents requiring implementation of the contingency plan (WAC -360(2)(k))?
- xii. Within fifteen days after the emergency, does the generator submit a written report of the incident to WDOE which includes:
1. Name, address, and telephone number of the generator (WAC -360(2)(k)(i)) and of the site (WAC -360(2)(k)(ii))?

2. Date, time, and type of emergency (WAC -360(2)(k)(iii))? ☒
3. Name and quantity of materials involved (WAC -360(2)(k)(iv))? ☒
4. The extent of injuries, if any (WAC -360(2)(k)(v))? ☒
5. An assessment of actual or potential hazards to human health or the environment, where this is applicable (WAC -360(2)(k)(vi))? ☒
6. Estimated quantity and disposition of recovered material that resulted from the incident (WAC -360(2)(k)(vii))? ☒

Comments _____

11. METHOD OF ACCUMULATION

How does the generator accumulate his dangerous wastes:

- A. In containers?
(Complete Section 12., below.) ☒
- B. In tanks?
(Complete Section 13., below.) ☒
- C. In piles (Note: This option is only available for moderate risk wastes)?
(Complete Section 14., below.) ☒

N/A

12. ADDITIONAL REQUIREMENTS FOR GENERATORS ACCUMULATING
WASTES IN CONTAINERS.

Yes No

- A. Are all containers in good condition, and are dangerous wastes transferred to good containers or otherwise managed if the original container leaks (WAC -630(2))? ✓
- B. Are all containers marked with the date accumulation began (WAC -200(1)(c))? ✓
- C. Are all containers made of or lined with materials that will not react or are otherwise compatible with the wastes being accumulated (WAC -630(4))? (If necessary, request and obtain documentation to demonstrate waste/container compatibility.) ✓
- D. Are all containers used for accumulating dangerous wastes:
- a. Always closed except when wastes are added or removed (WAC -630(5)(a))? ✓
- b. Not opened, handled, or stored (e.g., left in areas of heavy traffic where collisions could occur, or personnel or the public could intentionally or accidentally damage the containers) in ways that would rupture the containers or cause them to leak (WAC -630(5)(b))? ✓
- c. Stored in a manner which allows the generator to inspect each container for leaks, ruptures or deterioration? ✓
- E. Does the generator inspect at least weekly the areas where containers are used to accumulate wastes, looking for leaking containers and for deterioration from corrosion and other factors (WAC -630(6))? ✓
- F. Does the generator keep records of weekly inspections of his container storage area which describe (WAC -630(6)):
- a. The dates of inspection and name(s) of inspector(s)? ✓
- b. Observations of any leaks or container deterioration detected? ✓
- c. Measures taken to correct leaks or deteriorated containers (if any)? ✓

G. Are containers used for accumulating ignitable or reactive dangerous waste?

— ✓

If "Yes":

- a. Are containers holding reactive wastes (if any) capable of detonation or explosion, or that are forbidden explosives or Class A or B explosives (49 CFR 173.51, 53 or 88) stored equivalent to UFC's "American Table of Distances for Storage of Explosives," Table 77-201 (WAC -630(8)(a))?
- b. Are all other ignitable or reactive waste container storage designed, operated and maintained equivalent to the Uniform Fire Code, state or local fire codes, or NFPA Pamphlet #30, "Flammable and Combustible Liquids Code" (WAC -630(8)(b))?
- c. Are those areas where ignitable or reactive wastes are accumulated inspected at least yearly by a professional person familiar with the Uniform Fire Code, or by a federal, state, or local fire marshal (WAC -630(8)(b), -395(1)(d))?
- d. Does the generator keep records of these fire inspections which describe:
 - i. The dates of inspection and name(s) of inspector(s)?
 - ii. Observations of any unsafe or improper ignitable or reactive waste handling?
 - iii. Measures taken to correct any unsafe or improper ignitable or reactive waste handling?

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H. Are incompatible wastes or incompatible wastes and materials accumulated or held on-site (e.g., corrosives with ignitables, chlorinateds with ignitables)?

— N/A ✓

If "Yes":

- a. Describe which wastes or wastes and materials are incompatible:

b. Does the generator assure that dangerous wastes are not put in containers which previously held incompatible wastes or materials unless the container has been washed (WAC -630(9)(b))?

✓

c. Are containers holding waste that is incompatible with wastes or materials stored nearby separated or protected from such wastes or materials by a dike, berm, wall or other device, and are containment systems (if any) for incompatible wastes separate (WAC -630(9)(c))?

✓ N/A

d. Are incompatible wastes, or incompatible wastes and materials put in the same container?

✓

Describe which incompatible wastes or wastes and materials are involved:

e. If incompatible wastes or wastes and materials are mixed or commingled, are these activities conducted so as not to (WAC -630(9)(a)):

i. Generate extreme heat, pressure, fire, explosion or violent reaction (WAC -395(1)(b)(i))?

N/A

ii. Produce uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health or the environment (WAC -395(1)(b)(ii))?

iii. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions (WAC -395(1)(b)(iii))?

iv. Damage the structural integrity of the facility or containers (WAC -395(1)(b)(iv))?

v. Otherwise threaten human health or the environment (WAC -395(1)(b)(v))?

}

Note: If the generator is treating wastes as they are placed in his containers (other than simple mixing with an absorbent), he may be operating a dangerous waste treatment facility.

Comments _____

13. ADDITIONAL REQUIREMENTS FOR GENERATORS ACCUMULATING WASTES IN TANKS.

Yes No

A. Does the generator maintain a system of records which assure that no wastes held in his tanks are being accumulated for more than ninety days (one hundred eighty days for moderate risk wastes only)?

✓ N/A

B. Are wastes or other materials which are incompatible with the material of construction of the tanks ever placed in the tanks?

N/A

If "Yes," is the tank protected from corrosion, erosion or abrasion through use of:

a. An inner liner, free of leaks, cracks, holes or other deterioration, which is compatible with the waste or materials (WAC -640(3)(a)(i))?

b. Alternative protection (e.g., cathodic protection, corrosion inhibitors) (WAC -640(3)(a)(ii))?

C. Does the generator use appropriate measures to prevent overfilling and overtopping, including:

a. Controls to prevent overfilling (e.g., waste feed cut-off systems, by-pass to a standby tank) (WAC -640(3)(b)(i))?

✓

b. For uncovered tanks, maintenance of at least two feet of freeboard (WAC -200 (1)(b), -640(3)(b)(ii))?

✓

- I. Have any tanks been closed and removed from dangerous waste service since the last inspection?

— ✓ —

If "Yes":

- a. Have all dangerous wastes and residues been removed from the tanks, discharge control equipment, containment systems and bases (where present) and discharge confinement structures (WAC -640(5))?
- b. Have all tanks, bases, liners and soils containing or contaminated with dangerous wastes or residues been removed or decontaminated (WAC -640(5))?

— —

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- J. Are ignitable or reactive wastes placed in tanks?

— ✓ —

If "Yes":

- a. Is the tank only used for emergencies (WAC -640(6)(a)(iii))?
- b. Is the waste stored in such a way that it is protected from any material or conditions that may cause the waste to ignite or react (WAC -640(6)(a)(ii))?
- c. Is the waste treated, rendered or mixed before or immediately after placement in the tank so that (WAC -640(6)(a)(i)):
- i. The resulting mixture in the tank is no longer ignitable or reactive under WAC -090?
- ii. And, the mixing or commingling of the waste does not: generate extreme heat, pressure, fire, explosion or violent reaction; produce uncontrolled toxic mists, fumes, dusts or gases that threaten human health or the environment; produce uncontrolled flammable fumes or gases that pose a risk of fire or explosion; damage the structural integrity of the tank or equipment; otherwise threaten human health or the environment (WAC -395(1)(b))?

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Note: If the generator is treating wastes as they are placed in his tanks, he may be operating a dangerous waste treatment facility.

- d. Are the tanks located in a manner equivalent to the NFPA's buffer zone requirements for tanks (Tables 2-1 through 2-6 of the "Flammable and Combustible Liquids Code - 1981"), or as required by state and local fire codes if these are more stringent (WAC -640(6)(b))?

— —

e. At least yearly, is the tank storage area inspected by a professional person knowledgeable in the Uniform Fire Code, or by a local, state or federal fire marshal (WAC -640(6)(b), - 395(1)(d))?

f. Does the generator keep records of this annual inspection describing:

i. The dates of inspection and name(s) of inspector(s)?

ii. Observations of any unsafe or improper ignitable or reactive waste handling?

iii. Measures taken to correct any unsafe or improper ignitable or reactive waste handling?

K. Are incompatible wastes or incompatible wastes and materials placed in the same tank?

If "Yes":

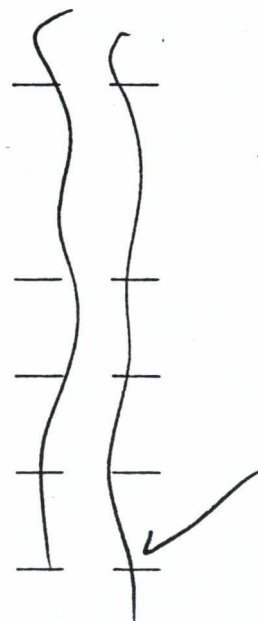
a. Describe which wastes or wastes and materials are incompatible:

b. If incompatible wastes or wastes and materials are placed in the same tank, or if dangerous waste is placed in an unwashed tank which previously held incompatible waste or materials, are these activities conducted so as not to (WAC -640(7)):

i. Generate extreme heat, pressure, fire, explosion or violent reaction (WAC -395(1)(b)(i))?

ii. Produce uncontrolled toxic mists, fumes, dusts or gases that threaten human health or the environment (WAC -395(1)(b)(ii))?

iii. Produce uncontrolled flammable fumes or gases that pose a risk of fire or explosion (WAC -395(1)(b)(iii))?



iv. Damage the structural integrity of the tank or equipment (WAC -395(1)(b)(iv))?

v. Otherwise threaten human health or the environment (WAC -395(1)(b)(v))?

Note: If the generator is treating incompatible wastes as they are placed in his tanks, he may be operating a dangerous waste treatment facility.

Comments _____

14. ADDITIONAL REQUIREMENTS FOR GENERATORS ACCUMULATING WASTES IN PILES.

Yes No

Note: This section is applicable to only those moderate risk wastes a generator may be accumulating.

A. Does the generator keep records of any leaks of liquids into the leak detection system that have occurred, describing (WAC -660(3)(b)):

a. Dates and times leaks were detected?

b. Measures taken to remove accumulated liquids and stop leakage that is occurring?

c. Certification by a qualified engineer that the leak has been stopped?

B. Does the generator keep records of any notifications sent to WDOE that there have been leaks into the leak detection system (if any?)

C. [Remainder to be added at a later date.]

DANGEROUS WASTE COMPLIANCE CHECKLIST/QUESTIONNAIRE, CHAPTER 173-303 WAC

PART IV: GENERAL TSD FACILITY REQUIREMENTS

This part of the checklist/questionnaire applies to all facilities which treat, store, or dispose (TSD) dangerous waste, including interim status and final status facilities, and permit-by-rule and emergency permit facilities (except that in such cases, only some of this part of the checklist/questionnaire may be applicable). This part of the checklist/questionnaire covers those facility requirements which apply to all TSD facilities regardless of the specific type of unit operations (e.g., containers, tanks, incinerators). Other parts of this checklist/questionnaire address the specific unit operating requirements for interim and final status facilities, and should be used in conjunction with this more general part. The abbreviation "O/O" is used frequently throughout the TSD facility parts of this checklist/questionnaire and stands for the words "owner and/or operator."

1. MODERATE RISK WASTE MANAGEMENT.

Yes No

Does the facility manage any moderate risk wastes (MRW) for which the O/O has sought and obtained from WDOE reduction in the regulatory requirements applicable to such MRW (such reductions must be specified either in the facility permit issued under WAC -806, or else in a notice of interim status modification issued under WAC -805(8))?

☒

If not, then all sections of this Part IV of the checklist/questionnaire are applicable. If yes, then some sections of this Part IV may not be applicable to such MRW management. Notes should be made in the appropriate Comments area where there may be discrepancies between the requirements on MRW and on any other dangerous wastes managed at the facility (e.g., fire control equipment may be checked as present and in good operating condition except for MRW, with a note under comments that such equipment was not present in the MRW management areas because it is not necessary).

2. FACILITY SITING (WAC -420).

Yes No

A. Earthquake Fault Criteria (WAC -420(3)).

- a. Is the facility located in any one of the following counties (WAC -420(3)(c))? (If "No," the facility is automatically in compliance with the earthquake fault criteria and no further questions need to be asked.)

☒

Chelan	Grays Harbor	Mason	Skamania
Clallam	Jefferson	Okanogan	Snohomish
Clark	<u>King</u>	Pacific	Thurston
Cowlitz	Kitsap	Pierce	Wahkiakum
Douglas	Kittitas	San Juan	Whatcom
Ferry	Lewis	Skagit	Yakima
Grant			

- b. Is the facility located within 200 feet of a fault which has had displacement in Holocene times (WAC -420(3)(a))?

Note: Existing facilities (i.e., operating prior to November 19, 1980 for EPA wastes and prior to August 9, 1982 for state-only wastes) may be located within 200 feet of such faults. New facilities may not.

- c. If the facility manages only moderate risk wastes, and is a new facility located within 200 feet of a fault, is the facility engineered against earthquakes and has WDOE approved the engineering (WAC -420(3)(a))?

B. Floodplain Criteria (WAC -420(4)).

- a. Is the facility located in a one hundred year floodplain (WAC -420(4)(a))? (If "No," then the facility is automatically in compliance with the floodplain criteria and no further questions need to be asked.)
- b. Is the facility designed, constructed, operated, and maintained to prevent washout of any dangerous waste by a one hundred year flood (WAC -420(4)(a) and (b))? (Describe the washout precautions under Comments, below.)
- c. If the facility manages DW only and never manages EHW, in lieu of washout precautions has the facility O/O included in his contingency plan procedures for safely removing the DW, before floodwaters reach the facility, to another facility that is not vulnerable to floodwaters (WAC -420(4)(a))? (If "Yes," these provisions will be addressed in the Contingency Plan section, below.)

C. Shoreline Criteria (WAC -420(5)).

- a. Is the facility disposing of dangerous waste in an area defined as a "wetland" under RCW 90.58.030 (2)(f). ("Wetlands" or "wetland areas" means those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward two hundred feet from such floodways; and all marshes, bogs, swamps, and river deltas associated with the streams, lakes, and tidal waters which are subject to the provisions of this chapter; the same to be designated as to location by the department of ecology.) (WAC -420(5)(a))?

- b. Is the facility located in an area where the local shoreline management master program permits industrial, navigation, manufacturing, or similar activities (areas classified as natural, conservancy, rural or residential may not be used for dangerous waste management: WAC -420(5)(b))?

☒

D. Sole Source Aquifer Criteria (WAC -420(6)).

Is this a new facility (constructed and operating after November 19, 1980 for EPA wastes, after August 9, 1982 for state-only wastes) that is disposing of dangerous waste over a sole source aquifer designated pursuant to section 1424(3) of the Safe Drinking Water Act?

Comments

The facility has been at Pier 91 since WWTL.

☒

3. SECURITY (WAC -310).

Yes No

A. Can the facility O/O demonstrate that:

- a. Physical contact with wastes or equipment within the active portion will not injure persons or livestock (WAC -310(1)(a))?
- b. Disturbance of wastes by persons or livestock will not result in violations of ch. 173-303 WAC (WAC -310(1)(b))?

☒

B. If the facility O/O cannot demonstrate both of the above, then does the facility have:

- a. Either:
- i. A barrier (artificial, natural or both) which completely surrounds the active portion, with a means to control access through gates or other entrances to the active portion at all times (WAC -310(2)(c))?

☒

- ii. Or, a twenty-four hour surveillance system to monitor and control entry to the active portion (WAC -310(2)(b))?
- b. And, signs which (WAC -310(2)(a)):
 - i. Are posted at each entrance to the active portion, and at other locations in sufficient numbers to be seen from any approach?
 - ii. Bear the legend (or an equivalent one), written in English, "Danger-Unauthorized Personnel Keep Out"?
 - iii. Are legible from a distance of twenty-five feet or more?
- C. If the facility has or is a totally enclosed treatment facility or elementary neutralization or wastewater treatment unit, in lieu of item B., above, does the O/O prevent unknowing entry and minimize the possibility of unauthorized entry by persons or livestock onto those portions of his facility (WAC -310(3))?

Comments

The facility is rented from The Port of Seattle Authority. Pier 91 has 24-hour guards at all gates. The pier is a pier Therefore shipper dock load and unload. The company through the Port Authority has made all active groups on the pier aware of the boundaries of the facility.

4. MANIFEST SYSTEM (WAC -370).

- A. Does the facility receive any manifested shipments of dangerous waste from off-site?
- If "No," then do not complete the rest of the questions in this section 4. Manifest System. If "Yes," complete the remaining questions.
- B. Does the O/O retain copies of all manifests and shipping papers at the facility for at least three years after shipments are delivered (WAC -370(2)(e) and (3)(e))?
- C. When a shipment is received accompanied by a manifest, does the O/O or his agent:

- a. Sign and date each copy of the manifest to certify receipt (WAC -370(2)(a))?
- b. Note any significant discrepancies on each copy of the manifest (WAC -370(2)(b))?
- c. Immediately give the transporter at least one copy of the signed manifest (WAC -370(2)(c))?
- d. Within thirty days after delivery, send a copy of the signed manifest to the generator (WAC -370(2)(d))?
- D. When a shipment accompanied by a manifest or shipping paper (M/SP) is received from a rail or water transporter, does the O/O or his agent:
- a. Sign and date each copy of the M/SP to certify receipt (WAC -370(3)(a))?
- b. Note any significant discrepancies on each copy of the M/SP (WAC -370(3)(b))?
- c. Immediately give the rail or water transporter at least one copy of the M/SP (WAC -370(3)(c))?
- d. Within thirty days after delivery, send a copy of the signed M/SP to the generator (WAC -370(3)(d))?
- If the manifest is not received within thirty days after delivery, send a copy of the signed and dated shipping paper to the generator (WAC -370(3)(d))?
- E. Does the O/O:
- a. Have procedures which he follows to identify significant discrepancies between the shipments he receives and the shipment described on the manifest?
- b. Detect the following types of significant discrepancies (WAC -370(4)(a)):
- i. Variations in quantities of greater than ten percent for bulk shipments?
- ii. Variations in piece count (e.g., missing containers or packages)?
- iii. Variations in waste type, discovered by inspection or waste analysis (e.g., acid substituted for solvent)?

- c. Attempt to resolve significant discrepancies (if any) with the transporter or generator (WAC -370(4)(b))?
- d. If a significant discrepancy is not resolved within fifteen days of its discovery, immediately submit a manifest discrepancy report and a copy of the manifest or shipping paper to WDOE (WAC -370(4)(b))?

✓

✓

List any dates since the last inspection (or since notification if this is the first inspection) that the O/O submitted manifest discrepancy reports (if any) to WDOE.

F. Under certain circumstances the O/O may refuse acceptance of a waste shipment and send it on to another facility.

a. Does the O/O deny receipt of a shipment only under the following circumstances (WAC -370(5)(a)):

- i. His facility is not capable of properly managing the waste?
- ii. There is a significant discrepancy between the shipment and the manifest or shipping paper?
- iii. The shipment has arrived in a condition which would present an unreasonable hazard to his facility operations or personnel?

✓

✓

✓

b. If the O/O chooses to deny receipt of the shipment but the containers are damaged or the waste is in a condition that would pose a hazard if transported, does the O/O implement the provisions of his contingency plan designed to address such situations (WAC -370(5)(c))?

✓

c. When he denies receipt of the shipment, does the O/O either send the shipment on to the alternate facility designated on the manifest or shipping paper, or contact the generator to identify another facility and provide for the shipment's delivery to that facility (WAC -370(5)(b))?

✓

Comments

The facility has limits on what it will receive - METRO Discharge requirements and what the unit can handle without problems.

5. WASTE ANALYSIS (WAC -300).

Yes No

A. Does the facility O/O have a waste analysis plan which is kept at the facility (WAC -300(5))?

✓

B. Does the waste analysis plan cover the following areas:

a. How the O/O shall obtain detailed chemical, physical, or biological analyses of wastes adequate to assure safe TSD in accordance with Ch. 173-303 WAC, including where appropriate: data from existing documents or publications; data on wastes generated from similar processes; or, data from actual testing (WAC -300(2))?

✓

b. For facilities receiving waste shipments from off-site, how the O/O shall confirm that each waste received matches the identity of the waste specified in the manifest or shipping paper (WAC -300(3))?

 ✓

c. Repeating of analyses to assure accurate information as necessary, including repeat analyses at least when: the O/O has been notified or has reason to believe that the process generating the waste has significantly changed; and, a waste received from off-site does not match the identity specified on the manifest or shipping paper (WAC -300(4))?

✓

C. Does the waste analysis plan assure that the areas described under item B., above, are adequately satisfied by inclusion of at least the following:

a. The parameters for which each waste will be analyzed and rationale for these parameters. (WAC -300(5)(a))?

✓

b. The methods of obtaining or testing for these parameters (WAC -300(5)(b))?

 ✓

c. The methods for obtaining representative waste samples (WAC -300(5)(c))?

 ✓

- d. The frequency with which analyses will be reviewed or repeated to assure accurate and current information (WAC -300(5)(d))?
- e. The waste analyses which generators have agreed to provide (WAC -300(5)(e))?
- f. The procedures for quality assurance and quality control, including at least:
- i. Measures to prevent sample contamination during sampling?
 - ii. Certification/documentation of sampling and testing procedures?
 - iii. Evaluation of personnel performance of sampling/testing?
 - iv. Chain of custody procedures?
 - v. Inspection, calibration, testing, and maintenance of sampling and analysis equipment?
- g. For facilities receiving wastes from off-site, the procedures for confirming the waste identity specified on the manifest or shipping paper (WAC -300(5)(g))?
- Do these procedures include at least:
- i. Procedures for identifying each waste movement at the facility?
 - ii. Methods for obtaining representative waste samples, if the identification method involves sampling?
- h. Methods for meeting the additional waste analysis requirements for specific waste management methods as specified for interim and final status TSD under items D. and E., below (WAC -300(5)(f))?
- D. Interim Status Waste Analysis Requirements for Specific Waste Management Methods.

Where appropriate, does the waste analysis plan include procedures for the following interim status management methods:

a. Containers.

- i. Determining compatibility of a waste to a container (if not determined when containers were first selected)?
- ii. Determining compatibility of a waste to other wastes or materials stored nearby?
- iii. Determining compatibility of a waste to wastes previously held in reused containers that were not decontaminated?
- iv. Analyzing ignitable/reactive containerized wastes?
- v. Analyzing liquids that are collected in a storage area?
- vi. Determining whether or not runoff collected from the active portion would be designated as a dangerous waste?

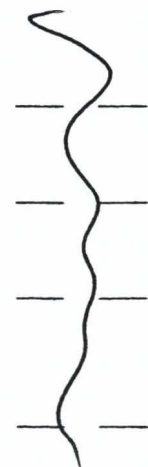
b. Tanks (40 CFR 265.193).

- i. Determining compatibility of a waste to a tank (if not determined when tank was first selected)?
- ii. Determining compatibility of a waste to any raw materials or other wastes potentially or previously held in the tank by conducting analyses or trial treatment or storage tests (e.g., bench scale, pilot plant) or by obtaining written documented information on similar storage or treatment of similar wastes under similar conditions?
- iii. Determining the compatibility of a waste to other wastes or materials held or treated nearby?
- iv. Analyzing ignitable/reactive wastes managed in tanks?
- v. Determining whether or not runoff collected from the active portion would be designated as a dangerous waste?

c. Surface Impoundments (40 CFR 265.225).

- i. Determining compatibility of a waste to the impoundment's materials of construction (if not determined when materials were first selected)?

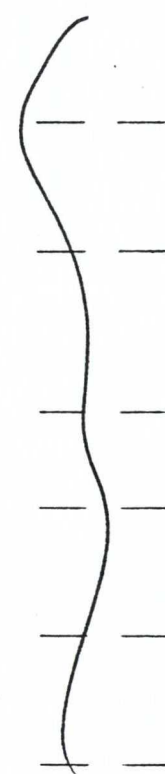
- ii. Determining the compatibility of a waste to any raw materials or other wastes potentially previously held in the impoundment by conducting analyses or trial treatment or storage tests, or by obtaining written documented information on similar treatment or storage of similar wastes under similar conditions?
- iii. Determining the compatibility of a waste to other wastes or materials held or treated nearby?
- iv. Procedures for analyzing ignitable/reactive wastes managed in impoundments?
- v. Determining whether or not runoff (if any) collected from the active portion would be designated as a dangerous waste?



d. Waste Piles (40 CFR 265.252).

- i. Determining the compatibility of a waste to the pile's materials of construction (if not determined when materials were first selected)?
- ii. Determining the compatibility of each waste to be added to the pile (including visual comparison of color and texture) to assure that inadvertent mixing of incompatible wastes does not occur, unless the O/O can show that either: the only wastes to be added to the pile are compatible; or, the waste received is compatible with the waste in the pile to which it is added?
- iii. Determining the compatibility of a waste to other wastes or materials potentially held or treated nearby.
- iv. Determining the compatibility of a waste to wastes previously held on the pile base if it was not decontaminated (unless it can be proven the wastes are the same)?
- v. Analyzing ignitable/reactive wastes managed in waste piles?
- vi. Sampling and analyzing leachate collected beneath the pile, and managing the leachate if hazardous?
- vii. Determining whether or not runoff collected from the active portion would be designated as a dangerous waste?

N/A



e. Land Treatment (40 CFR 264.273).

- i. Determining the concentration in the waste of any substances which exceed the EP toxicity concentration limits of WAC -090(8)(c)?
- ii. For any waste listed in WAC -081 or -082, determining the concentrations of any substances which caused the waste to be listed?
- iii. For any waste mixture designated under WAC -084 or the criteria of WAC -101 through -103, determining the concentrations of any substances which caused the waste to be designated?
- iv. If food chain crops are grown, procedures for determining the concentrations of arsenic, cadmium, lead and mercury, unless the O/O has written, documented data showing the constituent is not present?
- v. Procedures to determine the compatibility of a waste to any raw materials or other wastes potentially applied in a given treatment zone?
- vi. Determining the compatibility of a waste to other wastes or materials held or treated nearby?
- vii. Procedures for analyzing ignitable/reactive wastes to be treated?
- viii. Determining whether or not runoff collected from the active portion would be designated as a dangerous waste?

N/A

f. Landfills.

- i. Inspecting containers for free liquids before disposal and for handling any unacceptable free liquids that may appear?
- ii. Inspecting containers for 90% volume by waste and for handling any containers of waste that are unacceptable by the facility that may appear?
- iii. Determining the compatibility of a waste to landfill liner(s) and leachate collection system materials (if not determined when materials were first selected)?
- iv. Determining the compatibility of a waste to any other wastes potentially disposed in the landfill?

N/A

- v. Analyzing ignitable/reactive wastes to be disposed?
- vi. Sampling and analyzing leachate collected and managing the leachate if dangerous?
- vii. Determining whether or not runoff collected from the active portion would be designated as a dangerous waste?
- g. Incinerators (40 CFR 265.341).
- i. Analyzing any waste not previously burned in the incinerator to enable the O/O to establish steady state operating conditions and to determine the types of pollutants which might be emitted?
- Do these analyses include determining at least:
1. Heating value of the waste?
 2. Halogen and sulfur content of the waste?
 3. Concentrations of lead and mercury in the waste, unless the O/O has written, documented data showing that the element is not present?
- ii. Determining the compatibility of wastes to be mixed in the incinerator, and the compatibility of wastes to be burned with the incinerator's materials of construction?
- iii. Determining whether or not runoff collected from the active portion would be designated as a dangerous waste?
- h. Thermal Treatment (40 CFR 265.375).
- i. Analyzing any waste not previously treated in the thermal treatment unit to enable the O/O to establish steady state operating conditions and to determine the types of pollutants which might be emitted?
- Do these analyses include determining at least:
1. Heating value of the waste?
 2. Halogen and sulfur content of the waste?
 3. Concentrations of lead and mercury in the waste, unless the O/O has written, documented data showing that the element is not present?

N/A

N/A

- ii. Determining the compatibility of wastes to be mixed in the thermal treatment unit, and the compatibility of wastes to be burned with the unit's materials of construction?
 - iii. If open burning of wastes is conducted, analyzing the wastes to assure that only explosive wastes with the capability of detonation are being open burned?
 - vi. Determining whether or not runoff collected from the active portion would be designated as a dangerous waste?
- i. Chemical, Physical and Biological Treatment (40 CFR 265.402).
- i. Whenever substantially different wastes are to be treated or substantially different treatment processes are to be used:
 - 1. Procedures for conducting waste analyses and trial treatment tests (e.g., bench scale, pilot plant)?
 - 2. Or else, procedures for obtaining written, documented information on similar treatment of similar wastes under similar conditions?
 - ii. Procedures to determine the compatibility of a waste to process structure (if not determined when structure was first selected)?
 - iii. Procedures to determine the compatibility of a waste to any raw materials or other wastes potentially or previously held in the process structure?
 - iv. Procedures to determine the compatibility of a waste to other wastes or materials held or treated nearby?
 - v. Procedures for analyzing ignitable/reactive wastes managed in the process structure?
 - vi. Determining whether or not runoff collected from the active portion would be designated as a dangerous waste?

✓ _____

✓ _____

✓ _____

✓ _____

✓ _____

✓ _____

E. Final Status Waste Analysis Requirements for Specific Waste Management Methods.

[Reserved]

Comments

The company requests information on all wastes received. They do not have all steps used to determine waste I.D. written down. They have limits on pH Cr^{6+} CN^- . Sampling methods are not specific. They receive waste information, check when it arrives - if outside limits back it goes when from new generator. They have faith with old generators.

6. INSPECTIONS (WAC -320).

Yes No

A. Does the facility O/O have a written inspection schedule which is kept at the facility (WAC -320(2))?

☒ ☐

B. Does the facility O/O keep a written inspection log or summary (WAC -320(2)(d)):

a. Which shows that the inspection schedule is being followed?

☒ ☐

b. Including at least:

i. The time, date, and nature of the inspection?

☒ ☐

ii. The printed name and handwritten signature of the inspector?

☒ ☐

- iii. Notations of observations made? ☒
- iv. Date and nature of any repairs or remedial actions? ☒
- c. For at least three years from the date of inspection? ☒
- C. When the facility O/O discovers any problems during an inspection, does he remedy the problems on a schedule which prevents hazards to the public health and the environment (immediately where a hazard is imminent or has already occurred) (WAC -320(3))? ☒
- D. Does the inspection schedule identify (WAC -320(2)):
- a. The areas of the facility to be inspected? ☒
- b. The equipment to be inspected, including at least all:
- i. Monitoring equipment? ☒
- ii. Safety and emergency equipment? ☒
- iii. Security devices? ☒
- iv. Operating and structural equipment that help prevent, detect or respond to hazards to public health or the environment? ☒
- c. Areas subject to spills (to be inspected daily when in use)? ☒
- d. The frequencies with which these areas and items are to be inspected? ☒
- e. The types of problems to be looked for during inspections? ☒
- f. And the additional inspections to be conducted for specific waste management methods as specified for interim and final status TSD under items E. and F., below? ☒
- E. Interim Status Inspection Requirements for Specific Waste Management Methods. Yes No
- Where the following types of management methods are employed, does the inspection schedule specify the additional items to be inspected, inspection frequency and types of problems to be looked for?
- a. Containers (40 CFR 265.174).
- i. Areas where containers are held, at least weekly, to detect leaks and deterioration caused by corrosion and other factors? ☒

- ii. Areas where containers are held to assure that:
 - 1. Maximum storage capacity is not exceeded? ☒
 - 2. Incompatible wastes are not stored together? ☒
 - 3. Ignitable or reactive waste containers are not stored near sources of heat, ignition or reaction? ☒
 - 4. Proper containers are used for holding wastes? ☒
- b. Tanks (40 CFR 265.194).

Wherever present:

 - i. Discharge control equipment (e.g., bypass systems) at least once each operating day? ☒
 - ii. Data gathered from monitoring equipment (e.g., pressure gauges) at least once each operating day? ☒
 - iii. The level of waste in the tank at least once each operating day? ☒
 - iv. The construction materials of the tank at least weekly to detect corrosion or deterioration? ☒
 - v. The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes) for signs of erosion or leakage (e.g., cracks, wet spots) at least weekly? ☒
- c. Surface Impoundments (40 CFR 265.226).
 - i. The freeboard level at least once each operating day? ☒
 - ii. The surface impoundment, including dikes and vegetation surrounding the dike for signs of leaks, deterioration or failures at least weekly? ☐
- d. Waste Piles.
 - i. Run-on and run-off control systems (if any) for signs of leaks, failure or deterioration? ☒
 - ii. Covers, buildings or other mechanisms (if any) for repelling precipitation and run-on for leaks, deterioration, or failure? ☐
 - iii. Covers or other methods (if any) to prevent wind dispersal? ☐

e. Land Treatment.

- i. Run-on and run-off control systems for signs of leaks, deterioration or failure?
- ii. Wind dispersal control measures (if any)?
- iii. The land treatment area, to assure that:
 - 1. Waste and/or material (e.g., water) application rates are not exceeded?
 - 2. Ignitable, reactive and/or incompatible wastes are protected from sources of ignition or reaction?

f. Landfills.

- i. Run-on and run-off control systems for signs of leaks, deterioration or failure?
- ii. Wind dispersal control measures (if any)?
- iii. Covers over any closed cells or parts of the landfill to detect signs of erosion, leaks, deterioration or failure of the cap?
- iv. Active cells to assure that incompatible wastes are not disposed together?
- v. Cells in which ignitable wastes in containers are disposed (if any) to assure that they are not being exposed to materials or conditions that could cause them to ignite?

g. Incinerators (40 CFR 265.347).

- i. Existing instruments which relate to combustion and emission control at least every 15 minutes (e.g., instruments measuring waste feed, auxiliary fuel feed, air flow, temperature, scrubber flow, scrubber pH and relevant level controls)?
- ii. The complete incinerator and associated equipment at least daily for leaks, spills, fugitive emissions and deterioration?
- iii. All emergency shutdown controls and alarm systems at least daily to assure proper operation?

N/A

}

N/A

}

N/A

}

h. Thermal Treatment (40 CFR 265.377).

- i. Existing instruments which relate to temperature and emission control (e.g., instruments measuring waste feed, auxiliary fuel feed, temperature, and relevant process flow and level controls) at least every 15 minutes?
- ii. The stack plume (emissions), observed visually at least every hour for normal appearance (color, opacity)?
- iii. The complete treatment process and associated equipment at least daily for leaks, spills, fugitive emissions and deterioration?
- iv. All emergency shutdown controls and alarm systems at least daily to assure proper operation?
- v. For open burning of waste explosives, the area of open burning to assure that it meets the minimum distance to the nearest other property limits?

i. Chemical, Physical and Biological Treatment (40 CFR 265.403).

- i. Discharge control and safety equipment (e.g., cut-off and bypass systems) at least once each operating day?
- ii. Data gathered from monitoring equipment at least once each operating day?
- iii. Construction materials of the treatment process or equipment at least weekly for signs of corrosion, leaks, deterioration, or failure?
- iv. Construction materials of and areas immediately surrounding discharge confinement structures (e.g., dikes) at least weekly for signs of erosion, leakage, deterioration or failure (e.g., cracks, wet spots, dead vegetation)?

F. Final Status Inspection Requirements for Specific Waste Management Methods.

Yes No

Where the following types of management methods are employed, does the inspection schedule specify the additional items to be inspected, inspection frequency and types of problems to be looked for?

[Reserved.]

Yes No

✓

a. Are those areas where ignitable or reactive wastes are stored inspected at least yearly by a professional person familiar with the Uniform Fire Code, or by a federal, state, or local fire marshal (WAC -395(1)(d))?



i. The dates and times of inspection and name(s) of inspector(s)?

✓

✓

✓

✓

[illegible]

7. PERSONNEL TRAINING (WAC -330).

Yes No

- A. Does the facility O/O have a written training plan, kept at the facility site (WAC -330(2))? ✓
- B. Does the training plan include the following documents and records:
- a. For each position related to the handling of dangerous waste on-site, the job title, name of employee filling each job, and the job description, including requisite skills, education, qualifications, and duties for each position (WAC -330(2)(a))? ✓
- b. Written description of type and amount of introductory and continuing training needed for each position (WAC -330(2)(b))? ✓
- c. Records documenting that employees have received and completed the necessary training (WAC -330(2)(c))? ✓
- C. Are training records retained for at least three years after an employee last worked at the facility, or until the facility closes, whichever, occurs first (WAC -330(3))? (Note: Records may have been transferred within the company to follow an employee. This is permissible, but some record of the employee's transfer and continued employment should be documented.) ✓
- D. Does the O/O provide a training program that teaches personnel to perform their duties in ways that ensures the facility's compliance with WAC 173-303 (WAC -330(1))? ✓
- E. Does the training program involve:
- Classroom Instruction? ✓
- On-the-job training? ✓
- F. Is the training program directed by a person knowledgeable in dangerous waste handling practices (WAC -330(1)(a))? ✓

- G. Do the O/O's employees participate in an annual review of the training provided in the training program (WAC -330(1)(b))? ☒
- H. Is the training program successfully completed by each employee within six months of being employed at the facility, or of being assigned to a new position, whichever is later (WAC -330(1)(c))? ☒
- I. Are new employees supervised until they complete the training program (WAC -330(1)(c))? ☒
- J. Does the training program:
- a. Include training relevant to the positions in which personnel are employed (WAC -330(1)(a))? ☒
 - b. Instruct personnel on contingency plan implementation (WAC -330(1)(a))? ☒
 - c. Familiarize personnel with emergency equipment and systems, and emergency procedures (WAC -330(1)(d))? ☒
- K. Where applicable, does the training program include the following parameters (WAC -330(1)(d))?
- a. Procedures for using, inspecting, repairing, and replacing emergency and monitoring equipment. ☒
 - b. Key parameters for automatic waste feed cut-off systems. ☒
 - c. Communications or alarm systems. ☒
 - d. Response to fires or explosions. ☒
 - e. Response to ground water contamination. ☒
 - f. Shutdown of operations. ☒

Comments: _____

8. PREPAREDNESS AND PREVENTION (WAC -340).

Yes No

A. Unless it can be demonstrated that the equipment is not necessary (specify why not in the Comments, below), are the following equipment present, tested regularly, and kept in good working order:

a. Internal communications or alarm system capable of providing immediate emergency instructions (WAC -340 (1)(a))?

Present?

Tested regularly?

Good working order?

☒ ☐
☒ ☐
☒ ☐
☒ ☐

b. A device capable of summoning police or fire departments or emergency response teams (e.g., telephone, two-way radio) (WAC -340(1)(b))?

Present?

Tested regularly?

Good working order?

☒ ☐
☒ ☐
☒ ☐

c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment (WAC -340(1)(c))?

Present?

Tested regularly?

Good working order?

☒ ☐
☒ ☐
☒ ☐

d. Water at adequate volume/pressure to supply hose streams, foam equipment, sprinklers or spray systems (WAC -340(1)(d))?

Present?

Tested regularly?

Good working order?

☒ ☐
☒ ☐
☒ ☐

B. Whenever dangerous waste is being handled, do all personnel involved have immediate access to an internal alarm or emergency communication system, either directly or through visual or voice contact with another employee (WAC -340(2)(a))?

☒ ☐

C. If there is ever just one employee present on the premises, does he have immediate access to a device (e.g., telephone, two-way radio) capable of summoning external emergency help (WAC -340(2)(b))?

☒ ☐

- D. Is adequate aisle space provided to allow for inspections and unobstructed movement of personnel, fire and spill control equipment and decontamination equipment during an emergency (WAC -340(3))?
- E. Do the hazards posed by the wastes handled at the facility require arrangements with local authorities? (If "Yes," complete the remaining questions, F. through J. below. If "No," document under Comments, below, why the hazards are not such as to warrant these arrangements.)
- F. Has the O/O arranged to familiarize police, fire departments, and emergency response teams with: the layout of his site; properties of wastes handled and associated hazards; places where personnel would normally be working; entrances to and roads on the site; and possible evacuation routes (WAC -340(4)(a))?
- G. Has the O/O arranged to familiarize local hospitals with the properties of dangerous wastes handled and the types of injuries or illnesses which could result from fires, explosions, or waste releases (WAC -340(4)(b))?
- H. Does the O/O have agreements with state emergency response teams, emergency response contractors, and equipment suppliers (WAC -340(4)(c))?
- I. Where more than one party might respond to an emergency, does the O/O have agreements designating primary emergency authority and support services to be provided (WAC -340(4)(d))?
- J. Has the O/O documented all instances where state or local authorities have declined to enter into the above arrangements. (WAC -340(5))?

Comments: _____

9. CONTINGENCY PLAN, EMERGENCY PROCEDURES AND EMERGENCIES
(WAC -350 AND -360).

Yes No

- A. Does the O/O have a contingency plan designed to lessen the potential impacts of a fire, explosion, or unplanned sudden or nonsudden release of dangerous wastes or dangerous waste constituents to air, soil, surface, or ground water (WAC -350(1))?
- B. Does the O/O have a Spill Prevention Control and Countermeasures (SPCC) plan amended to include a contingency plan (WAC -350(2))?
- C. Are copies of the contingency plan and revisions to it:
- a. Maintained at the facility (WAC -350(4)(a))?
- b. Submitted to all local police departments, fire departments and hospitals, and state and local emergency response teams that may provide emergency assistance (WAC -350(4)(b))?
- D. Is the contingency plan amended whenever:
- a. Applicable regulations are revised (WAC -350(5)(a))?
- b. The plan fails in an emergency (WAC -350(5)(b))?
- c. The facility changes in a way that increases the potential for fires, explosions or releases, or that changes the necessary emergency responses (WAC -350(5)(c))?
- d. The list of emergency coordinators changes (WAC -350(5)(d))?
- e. The list of emergency equipment changes (WAC -350(5)(e))?
- E. Does the contingency plan include:
- a. A description of the actions personnel must take in the event of an emergency circumstance (WAC -350(3)(a))?
- b. A description of the arrangements agreed to by local police and fire departments, hospitals, contractors, and state and local response teams to coordinate emergency services (WAC -350(3)(c))?
- c. A current list of emergency coordinators, including names, addresses and 24-hour phone numbers (WAC -350(3)(d))?

- d. If more than one emergency coordinator is listed, identification of a primary emergency coordinator, with the others listed in the order that they will assume responsibility as alternates (WAC -350(3)(d))?
 - e. A list of all emergency equipment kept on the site, including the location, physical description, and brief outline of the capability of each piece of equipment (WAC -350(3)(e))?
 - f. An evacuation plan (where evacuation could be necessary) for personnel, which describes signals to begin evacuation, evacuation routes, and alternate routes (WAC -350(3)(f))?
 - g. Provisions for removal of dangerous waste from the facility in the event of a flood if the facility is located in a 100-year floodplain (WAC -420(4)(a))?
 - h. Actions to be taken in the event that a dangerous waste shipment is received which cannot be managed at the facility and is not acceptable to the O/O, but cannot be transported back to the generator or an alternate facility because it is damaged or would pose a risk to public health or the environment (WAC -350(3)(b))?
- F. Do the information and elements described in the contingency plan assure that the O/O has taken adequate precautions for reacting to emergency circumstances? (If "No," specify what inadequacies exist in the Comments section, below.)
- G. Is an emergency coordinator on the premises at all times or available on-call at all times (WAC -360(1))?
- H. Is the emergency coordinator (and his alternates, if any) capable in the following areas (WAC -360(1)):
- a. Familiar with all aspects of the contingency plan?
 - b. Familiar with all operations and activities on the facility?
 - c. Familiar with the location and properties of all wastes handled?
 - d. Familiar with the location of all records kept on-site?
 - e. Familiar with the facility layout?
 - f. Has the authority to commit the resources needed to carry out the contingency plan?

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

✓

I. Are the following procedures implemented (or, to be implemented) in the event of an emergency:

- a. Does the emergency coordinator or his designee (EC/D) immediately activate internal alarms or communication systems to notify all personnel (WAC -360(2)(a)(i)) and notify appropriate state or local agencies with designated response roles if help is needed (WAC -360(2)(a)(ii))? ✓
- b. Does the EC/D immediately identify the character, exact source, amount and areal extent of any released materials (WAC -360(2)(b))? ✓
- c. Concurrently, does the EC/D assess possible hazards to human health and the environment (including direct, indirect, immediate and long-term effects) that may result from the emergency (WAC -360(2)(c))? ✓
- d. If the EC/D determines that the emergency could threaten human health or the environment outside the facility, does he immediately notify and provide an assessment report (which must include the information described under e., below) to:
 - i. The appropriate local authorities if evacuation of local areas may be advisable; and remain available to help appropriate officials decide if local areas should be evacuated (WAC -360(2)(d)(i))? ✓
 - ii. WDOE and either the government official designated as on-the-scene coordinator, or the National Response Center (WAC -360(2)(d)(ii))? ✓
- e. Does the assessment report (covered under d., above) include:
 - i. Name and telephone number of reporter (WAC -360(2)(e)(i))? ✓
 - ii. Name and address of the facility (WAC -360(2)(e)(ii))? ✓
 - iii. Time and type of emergency (e.g., fire, release) (WAC -360(2)(e)(iii))? ✓
 - iv. Name and quantity of materials involved (WAC -360(2)(e)(iv))? ✓
 - v. The extent of injuries, if any (WAC -360(2)(e)(v))? ✓
 - vi. Possible hazards to human health and the environment off the site (WAC -360(2)(e)(vi))? ✓

- f. During an emergency, does the EC/D take all measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other dangerous wastes (e.g., stopping processes or operations, collecting and containing releases, removing or isolating containers, etc.) (WAC -360(2)(f))?
- g. If operations stop in response to an emergency, does the EC/D monitor for leaks, pressure buildup, gas generation or ruptures wherever appropriate (WAC -360(2)(g))?
- h. Immediately after an emergency, does the EC/D provide for treating, storing, or disposing wastes and materials resulting from the emergency (WAC -360(2)(h))?
- i. Does the EC/D ensure, in the affected areas on the site, that:
- i. No waste that may be incompatible with the released material is treated, stored, or disposed until cleanup procedures are completed (WAC -360(2)(i)(i))?
- ii. All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations resume (WAC -360(2)(i)(ii))?
- j. Does the O/O notify WDOE, and appropriate local authorities, that his site satisfies the conditions described under i. and ii. above, before operations resume in the affected areas of his site (WAC -360(2)(j))?
- k. Does the O/O note in his operating record the time, date, and details of incidents requiring implementation of the contingency plan (WAC -360(2)(k))?
- l. Within 15 days after the emergency, does the O/O submit a written report of the incident to WDOE which includes:
- i. Name, address, and telephone number of the O/O (WAC -360(2)(k)(i)) and of the facility (WAC -360(2)(k)(ii))?
- ii. Date, time, and type of emergency (WAC -360(2)(k)(iii))?
- iii. Name and quantity of materials involved (WAC -360(2)(k)(iv))?

- b. Confining smoking and open flames to designated areas where ignitable or reactive waste is handled? ☒
- c. Posting "No Smoking" signs in conspicuous places wherever there is a hazard from ignitable or reactive waste? ☒
- C. Is the management of ignitable or reactive waste, and the mixture or commingling of incompatible wastes or incompatible wastes and materials conducted so that it does not:
- a. Generate extreme heat, pressure, fire, explosion, or violent reaction (WAC -395(1)(b)(i))? ☒
- b. Produce uncontrolled toxic mists, fumes, dusts or gases that threaten human health or the environment (WAC -395(1)(b)(ii))? ☒
- c. Produce uncontrolled flammable fumes or gases that pose a risk of fire or explosion (WAC -395(1)(b)(iii))? ☒
- d. Damage the structural integrity of the tank or equipment (WAC -395(1)(b)(iv))? ☒
- e. Otherwise threaten human health or the environment (WAC -395(1)(b)(v))? ☒
- D. Does the O/O document these precautions in his operating record (WAC -395(1)(c))? ☒

Comments: DOO1 wastes are only
permitted at the facility when the
Seattle Fire Dept. OK's shipment.

-11. LOADING AND UNLOADING AREAS (WAC -395(4)).

Yes No

Does the facility receive manifested shipments of liquid dangerous waste for management?

☒

If "Yes":

- A. Has the O/O provided an area (or areas) for loading and unloading waste shipments? ✓
- B. Is each loading/unloading area designed, constructed, operated and maintained to:
- a. Contain spills and leaks that might occur during loading/unloading (WAC -395(4)(a))? ✓
 - b. Prevent release of wastes or waste constituents to ground or surface waters (WAC -395(4)(b))? ✓
 - c. Contain washwaters (if any) from the cleaning and decontamination of transport vehicles and load/unload equipment (WAC -395(4)(c))? ✓
 - d. Allow for removal, as soon as possible, of collected wastes from spills, leaks and equipment washwaters (if any) in a manner to prevent releases to ground or surface waters (WAC -395(4)(d))? ✓

Comments:

The unloading area is sloped so that spills are directed to holding tanks below surface.

12. RECORDKEEPING (WAC -380).

Yes No

A. Operating Record.

- a. Does the O/O keep a written operating record at his facility which he maintains until his facility is closed (WAC -380(1))? ✓
- b. Does the operating record include the following information:
- i. Records and results of waste analyses (WAC -380(1)(c))? ✓
 - ii. Summary reports and details of all incidents that required implementing the contingency plan (WAC -380(1)(d))? ✓
 - iii. Records and results of all inspections (WAC -380(1)(e)) (Note--This information need only be kept for three years)? ✓

- iv. Monitoring, testing, or analytical data as required under the specific unit requirements for interim and final status (e.g., ground water monitoring data, incinerator stack emission analyses, etc.) (WAC -380(1)(f))?
- v. All closure and post-closure cost estimates (WAC -380(1)(g))?
- vi. For off-site facilities, copies of notices to generators informing them the facility has all appropriate permits (WAC -380(1)(h))?
- c. Does the O/O keep in his operating record the following information regarding the types of wastes he receives or manages on-site (WAC -380(1)(a)):
- i. A description of each waste providing the common name, waste number, and physical form (e.g., liquid, solid) (WAC -380(2)(a) and (b))?
- ii. Where a waste contains more than one process waste or waste constituent, all applicable waste numbers or else a description of the process which generated the waste (WAC -380(2)(a))?
- iii. The weight, or volume and density, for each waste using the units specified in Table 1 (WAC -380(2)(c))?

Table 1

Unit of Measure	Symbol	Density
Pounds	P	
Short tons (2000 lbs)	T	
Gallons (U.S.)	G	P/G
Cubic yards	Y	T/Y
Kilograms	K	
Tonnes (1000 kg)	M	
Liters	L	K/L
Cubic meters	C	M/C

- iv. The date and method of management for each waste, using the handling code(s) specified in Table 2 of WAC -380(2) (WAC -380(2)(d))?
- d. Does the O/O include in his operating record the location of each waste within his facility and the quantity at each location, and a cross-reference to specific manifest document numbers for each waste that was accompanied by a manifest (WAC -380(1)(b))?

e. If this is a disposal facility, does the O/O include a map or diagram of each cell or disposal area in his operating record to record the location and quantity of each waste (WAC -380(1)(b))?

N/A

B. Does the O/O ever manage ignitable, reactive, or incompatible wastes at his facility?

If "Yes":

a. Does the O/O include in his operating record records of the annual inspection by a Fire Marshall or other professional familiar with the Uniform Fire Code (WAC -395(1)(d))? (If "No," then these records must be entered in his inspection log or summary.)

✓

b. Does the operating record include documentation that the O/O manages his ignitable, reactive, or incompatible wastes in accordance with WAC -395(1)(a) and (1)(b) (e.g., does not cause extreme heat or pressure, toxic mists or fumes, damage facility integrity, etc.) (WAC -395(1)(c))? (Note--This documentation may be based on references to published scientific or engineering literature, data from trial tests, waste analyses, or the results of managing similar wastes by similar processes and operating conditions.)

✓

C. Does the O/O provide copies of all records, including plans, to WDOE upon request and make them available for inspection at all reasonable times (WAC -380(3)(a))?

✓

D. Will the O/O be sending copies of records of waste disposal locations and quantities at the time of his facility's closure to WDOE, EPA Region X Administrator, and the local land use and planning authority (WAC -380(3)(c))?

✓

Comments: _____

13. REPORTING (WAC -390).

Yes No

A. Unmanifested Waste Reports.

If the O/O receives from off-site a shipment of waste which was not manifested but should have been, then does he submit a Form 6 - Unmanifested Waste Report to WDOE within 15 days of receiving the shipment (WAC -390(1))?

✓

List the dates below that such reports were sent:

None _____

B. Annual Reports.

a. Does the O/O submit a Form 5-TSD Facility Annual Dangerous Waste Report to WDOE by March 1 of each year reporting the previous calendar year's waste management activities at the facility (WAC -390(2))?

✓

b. If the O/O ships waste off-site, does he submit a Form 4-Generator Annual Dangerous Waste Report to WDOE by March 1 of each year reporting the wastes for which he acted as a generator during the previous calendar year (WAC -390(2))?

✓

C. Additional Reports.

Does the O/O provide the following additional reports to WDOE (WAC -390(3)):

a. Reports of releases, fires, and explosions as required by the emergency procedures of WAC -360(2)(k)?

✓

b. Interim status ground water monitoring data, as specified in 40 CFR 265.94(a)(2) and (b)(2) (if applicable)?

N/A

c. Any other reports required by WDOE (list these reports, if any, and dates submitted under Comments, below)?

N/A

Comments: _____

DANGEROUS WASTE COMPLIANCE CHECKLIST/QUESTIONNAIRE, CHAPTER 173-303 WAC

PART V: INTERIM STATUS TSD FACILITY UNITS

This part of the checklist/questionnaire is applicable to all TSD facilities operating under interim status, except for those facilities or portions of facilities which are publicly owned treatment works (POTW), or are conducting elementary neutralization, totally enclosed treatment or wastewater treatment as these processes are defined in WAC -040 [Note--These processes are provided a permit by rule under WAC -802(4) and (5) if certain conditions are met. These conditions are certain general facility requirements covered under Part IV: General TSD Facility Requirements of this checklist questionnaire. If these conditions are not met and WDOE has revoked the permit by rule, then some or all of this Part V may be applicable].

The abbreviation "O/O" is used frequently throughout this part of the checklist/questionnaire and stands for the words "owner and/or operator."

Facility Name Chemical Processors, Pter 91 EPA/State ID# WAD0000812917
Inspector's Name Laurence Ashley Date January 16, 1986

Check the type(s) of unit operations that the O/O conducts at his facility and complete the sections of this Part V of the checklist/questionnaire identified for each type of unit.

: Containers (complete section 1.)	✓
: Tanks (complete section 2.)	✓
: Surface Impoundments (complete section 3.)	
: Piles (complete section 4.)	
: Land Treatment (complete section 5.)	
: Landfills (complete section 6.)	
: Incinerators (complete section 7.)	
: Thermal Treatment (complete section 8.)	
: Chemical, Physical, and Biological Treatment (complete section 9.)	✓

1. CONTAINERS (40 CFR Part 265 SUBPART I).

Yes No

A. Condition of containers (265.171).

- a. Are all containers holding wastes in good condition and free of leaks?

☒

If "No," describe the number, quantity, and contents of the bad or leaking containers, and describe the specific condition of these containers

They are a storage facility
so they hold some drums
for short times to
facilitate economic moves

- b. If a container is not in good condition or begins to leak, does the O/O either:

- i. Transfer the waste from the bad containers to a container in good condition?

☒

- ii. Or else manage the waste in same other way that complies with WAC 173-303 (describe these procedures under Comments, below)?

☒

B. Management of containers (265.173).

- a. Are all containers holding wastes kept closed during storage except when adding or removing wastes?

☒

- b. Are all waste containers being:

- i. Stored in a manner that prevents leaks or ruptures?

☒

- ii. Handled in a manner that prevents leaks or ruptures?

☒

- iii. Opened in a manner that prevents leaks or ruptures?

☒

C. Ignitable or reactive wastes (265.176).

- a. Are containers holding reactive wastes that are capable of detonation or explosion (designated by WAC -090(7)(a)(vi), (vii) or (viii)) stored with a buffer zone equivalent to the Uniform Fire Code's "American Table of Distances for Storage of Explosives," Table 77-201, 1979 Edition (WAC -440(1)(b))?
- b. Are containers holding ignitable wastes and reactive wastes (other than those cited in a., above) stored at least fifty feet from the facility's property line?

✓

✓

D. Container compatibility (265.172) and incompatible wastes (265.177).

- a. Are all containers made of or lined with materials which will not react with and are otherwise compatible with the waste to be stored, so that the ability to contain the waste is not impaired?
- b. Are incompatible wastes or incompatible wastes and materials ever placed in the same container, or are wastes ever placed in unwashed containers which previously held incompatible wastes?

✓

✓

If "Yes," are these practices conducted in a manner that assures compliance with WAC -395(1)(b)? (Be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire.)

- c. If wastes in containers are stored near any wastes or materials that are incompatible, are the waste containers protected from these incompatible wastes or materials by means of a dike, berm, wall, or other device?

If "Yes," describe the device.

Comments: _____

2. TANKS (40 CFR PART 265 SUBPART J).

Yes No

A. General operation (265.192).

a. Is each tank:

i. In good operating condition?

☒

ii. Free of leaks, cracks, ruptures, seam and fixture weaknesses, and any other problems that could lead to loss of wastes due to structural failures?

☒

If "No," describe any problems that were observed.

b. Does the O/O ever add wastes or treatment reagents to a tank which could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life?

☒

c. For any uncovered tanks, is each tank either:

i. Operated to ensure at least two feet (sixty centimeters) of freeboard?

N/A

ii. Or else, equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank), with a capacity that equals or exceeds the volume of the top two feet (60 cm) of the tank? (Note for calculation purposes: 1 cubic foot = 7.48 gallons; 1 cubic meter = 264.2 gallons.)

☒

d. Are any tanks operated with continuous waste feed?

If "Yes":

i. Describe which tanks and wastes are continuous feed systems (if all, just write "All").

- ii. Are these tanks equipped with a means to stop the waste inflow?

Describe the means (e.g., feed cutoff, bypass to standby tank, etc.).

bypass to standby tank
and feed cutoff.

B. Ignitable or reactive wastes (265.198).

- a. Are ignitable or reactive wastes ever placed in tanks?

If "Yes," does the O/O either:

- i. Use these tanks solely for emergencies?
- ii. Or else, store or treat the wastes in such a way that they are protected from materials or conditions which may cause ignition or reaction?
- iii. Or else, treat, render, or mix the wastes before or immediately after placement in the tank so that the wastes are not ignitable or reactive (by WAC -090(5) and (7)), and so that treating or mixing complies with WAC -395(1)(b)? (Note--If O/O conducts this activity, be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire.)

Describe which tanks, if any, receive ignitable or reactive wastes.

- _____
- _____
- _____
- _____
- _____
- _____
- b. Are tanks holding reactive wastes that are capable of detonation or explosion (designated by WAC -090 (7)(a)(vi), (vii) or (viii)) located with a buffer zone equivalent to the Uniform Fire Code's "American Table of Distances for Storage of Explosives," Table 77-201, 1979 Edition (WAC -440(1)(b))?
- c. Are covered tanks used for holding ignitable or reactive wastes located with a buffer zone equivalent to the National Fire Protection Association's requirements for tanks, contained in Tables 2-1 through 2-6 of "The Flammable and Combustible Liquids Code - 1981?"

C. Incompatible wastes (265.199).

If the O/O conducts the following activities, are these activities conducted so as to comply with WAC -395(1)(b) (Note--If the O/O conducts these activities and compliance with WAC -395(1)(b) is required, be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire):

- a. Treatment or storage of wastes in tanks? ☒
- b. Placement of incompatible wastes, or incompatible wastes and materials in the same tank? ☒
- c. Placement of wastes in an unwashed tank which previously held incompatible wastes or materials? ☒

Describe which tanks receive incompatible wastes and what those wastes are.

Comments: _____

3. SURFACE IMPOUNDMENTS (40 CFR PART 265 SUBPART K).

Yes No

A. Operation and containment (265.222 and 223).

- a. Does the O/O maintain each surface impoundment's freeboard to:
 - i. Be at least two feet (sixty centimeters)?
 - ii. Prevent any overtopping of the dike due to overfilling, wave action or a storm (Note-- This requirement may result in the need for more than two feet of freeboard.)?
- b. Do all earthen dikes (if any) have a protective cover (e.g., grass, shale, rock) to minimize wind and water erosion and to preserve structural integrity?

N/A

B. Ignitable or reactive wastes (265.229).

Are ignitable or reactive wastes ever placed in the surface impoundment(s)?

If "Yes," does the 0/0 either:

- a. Use the surface impoundment(s) solely for emergencies?
- b. Or else, treat, render, or mix the wastes before or immediately after placement in the surface impoundment(s) so that the wastes are not ignitable or reactive (by WAC -090(5) and (7)), and so that the treating or mixing complies with WAC -395(1)(b)? (Note--If O/O conducts this activity, be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire.)

Describe which surface impoundments (if any) receive ignitable or reactive wastes.

C. Incompatible wastes (265.230)

Are incompatible wastes or incompatible wastes and materials ever placed in the same surface impoundment(s)?

If "Yes":

- a. Does the O/O do this in a manner that assures compliance with WAC -395(1)(b)? (Note--Be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire.)
- b. Describe which surface impoundments receive incompatible wastes and what those wastes are.

Comments:

4. WASTE PILES (40 CFR PART 265 SUBPART L).

Yes No

A. Wind protection (265.251).

If the wastes in the pile(s) could be subject to wind dispersal, does the O/O cover or otherwise manage the pile(s) to prevent wind dispersal?

N/A

B. Containment (265.253).

Is leachate or runoff from the pile(s) a dangerous waste?

If "Yes," then does the O/O either:

- a. Protect the pile(s) from precipitation and run-on, and prevent the addition of liquids or wastes containing free liquids to the pile(s)?
- b. Or else, perform all of the following actions:
 - i. Place the pile(s) on an impermeable base that is compatible with the wastes under the conditions of treatment or storage?
 - ii. Design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the pile(s) during peak discharge from at least a twenty-five year storm?
 - iii. Design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a twenty-four hour, twenty-five year storm?
 - iv. Empty or otherwise manage run-on and run-off collection and holding facilities (e.g., tanks, basins) as quickly as possible to maintain design capacity of the systems? (Note--Collected run-off should be checked to determine if it is dangerous waste and, if so, managed accordingly.)

C. Ignitable or reactive wastes (265.256).

Are ignitable or reactive wastes ever placed in the pile(s)?

If "Yes," does the O/O either:

- a. Manage the wastes in such a way that they are protected from any materials or conditions which may cause them to ignite or react?
- b. Or else, treat, render, or mix the wastes before or immediately after placement in the pile(s) so that the wastes are not ignitable or reactive (by WAC -090(5) and (7)), and so that the treating or mixing complies with WAC -395(1)(b)? (Note--If O/O conducts this activity, be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire.)

Describe which pile(s) (if any) receive ignitable or reactive wastes.

D. Incompatible wastes (265.257).

- a. Are incompatible wastes, or incompatible wastes and materials ever placed in the same pile(s), or are wastes ever piled on the same area(s) where incompatible wastes or materials were previously piled without the area(s) being decontaminated?

If "Yes":

- i. Does the O/O do this in a manner that assures compliance with WAC -395(1)(b)? (Note--Be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire.)
- ii. Describe which pile(s) receive incompatible wastes and what those wastes are.

- b. If a pile of waste is incompatible with any waste or other material stored nearby in other containers, piles, open tanks, or surface impoundments, then does the O/O separate the pile from the other incompatible wastes or materials or otherwise protect them by means of a dike, berm, wall, or other device?

Describe the device(s) used to separate and protect the incompatible wastes or materials.

Comments:

5. LAND TREATMENT (40 CFR PART 265 SUBPART M).

Yes No

A. General operation (265.272).

- a. Is the land treatment unit effective in making the applied wastes less hazardous or nonhazardous by biological degradation or chemical reaction occurring in or on the soil?

X/A

If "No," describe the basis for this determination.

- b. Has the O/O designed, constructed, operated, and maintained a run-on control system capable of preventing flow onto active portions during peak discharge from at least a twenty-five year storm?
- c. Has the O/O designed, constructed, operated, and maintained a run-off management system capable of collecting and controlling a water volume at least equivalent to a twenty-four hour, twenty-five year storm?
- d. Are collection and holding facilities (e.g., tanks, basins) associated with run-on and run-off control systems emptied or otherwise managed expeditiously after storms to maintain design capacity of the systems? (Note--Run-off may be a dangerous waste and, if designated, must be managed appropriately.)
- e. If the treatment zone contains particulate matter which may be subject to wind dispersal, does the O/O manage the unit to control wind dispersal?

What method(s) does he use?

B. Unsaturated zone monitoring (265.278).

- a. Does the O/O have in writing and does he implement an unsaturated zone monitoring plan?

Is the plan designed to:

- i. Detect the vertical migration of waste and waste constituents under the active portions?
 - ii. Provide information on the background concentrations of the waste and waste constituents in similar but untreated soils nearby?
- b. Does the O/O keep the monitoring plan and the rationale used in developing the plan at his facility?
- c. Does the monitoring plan include, at a minimum:
- i. Soil monitoring using soil cores?
 - ii. Soil-pore water monitoring using devices such as lysimeters?
- d. In order to detect the vertical migration of waste and waste constituents below the active portions of his facility, does the O/O demonstrate in his monitoring plan that:
- i. The depth at which soil and soil-pore water samples are to be taken is below the depth to which waste is incorporated into the soil?
 - ii. The number of soil and soil-pore water samples to be taken is based on the variability of:
 - 1. The waste constituents (as identified in the facility waste analysis plan) in the waste and soil?
 - 2. The soil types?
 - iii. The frequency and timing of soil and soil-pore water sampling is based on the frequency, time, and rate of waste application, proximity to ground water, and soil permeability?
- e. Does the O/O analyze the soil and soil-pore water samples for the waste constituents that were found in the waste during analysis under his waste analysis plan?

C. Ignitable and reactive wastes (265.261).

Are ignitable or reactive wastes ever land treated?

N/A

If "Yes," does the O/O either:

- a. Manage the waste in such a way that it is protected from any material or condition which could cause it to ignite or react?
- b. Or else, treat, render, or mix the wastes before or immediately after placement in the land treatment unit(s) so that the wastes are not ignitable or reactive (by WAC -090(5) and (7)), and so that the treating or mixing complies with WAC -395(1)(b)? (Note--If O/O conducts this activity, be sure to complete section 10. of Part IV: General TDS Facility Requirements of this checklist/questionnaire.)

Describe which land treatment units (if any) receive ignitable or reactive wastes.

D. Incompatible wastes (265.282).

Are incompatible wastes or incompatible wastes and materials ever placed in the same land treatment unit(s)?

If "Yes":

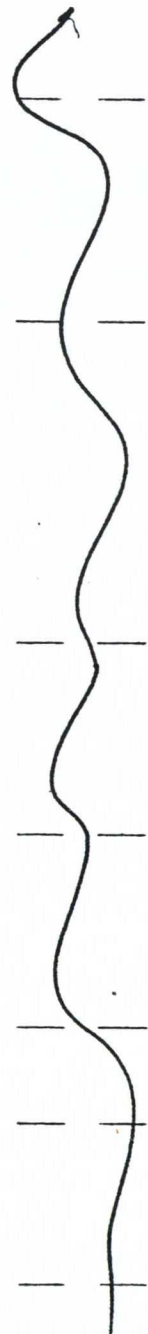
- a. Does the O/O do this in a manner that assures compliance with WAC -395(1)(b)? (Note--Be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire.)
- b. Describe which land treatment units receive incompatible wastes and what those wastes are.

E. Food chain crops (265.276).

Does the O/O grow food chain crops on the treated areas of any of his land treatment units?

If "No," then do not answer the remaining questions under this item. If "Yes," then continue with the remaining questions.

- a. Has the O/O notified WDOE that he is growing food chain crops on his land treated areas?
- b. Can the O/O demonstrate, based on field testing, that any arsenic, lead, mercury, or other waste constituents identified pursuant to the facility waste analysis plan will either:
 - i. Not be transferred to the food portion of the crop by plant uptake or direct contact, and will not otherwise be ingested by food chain animals?
 - ii. Or else, not occur in greater concentrations in the crops grown on the land treatment facility than in the same crops grown on untreated soils under similar conditions in the same region?
- c. When making either of the demonstrations described under b., above, is the information used to make the demonstration:
 - i. Kept at the facility?
 - ii. Based on tests for the specific waste and application rates being used at the facility?
 - iii. Inclusive of descriptions of crop and soil characteristics, sample selection criteria, sample size determination, analytical methods, and statistical procedures?



- d. Does the waste applied to treatment areas where food chain crops are grown contain cadmium?

If "Yes," does the O/O satisfy the requirements of either e. or f., below?

- e. Does the O/O perform or assure that all of the following actions occur:

- i. Unless the waste contains two mg/kg (dry weight) cadmium or less, is the pH of the waste and soil mixture 6.5 or greater at the time of each waste application?
- ii. If the land treatment area is used for production of tobacco, leafy vegetables or root crops for human consumption, is the annual application of cadmium from waste less than 0.5 kilograms per hectare (kg/ha)? (Note--One hectare equals 10,000 square meters, and equals 2.741 acres.)
- iii. For any other food chain crops, is the annual application of cadmium from waste less than:
 1. 1.25 kg/ha from July 1, 1984 to December 31, 1986?
 2. 0.5 kg/ha beginning January 1, 1987?
- iv. If the background soil pH is greater than 6.5, or if the pH of the waste and soil mixture is adjusted to and maintained at 6.5 (even though the background soil pH is less than 6.5) while crops are grown, then is the cumulative application of cadmium from waste less than the amounts shown in the following table?

<u>Soil Cation Exchange Capacity (meq/100g)</u>	<u>Maximum Cumulative Application (kg/ha)</u>
Less than 5	5
5 to 15	10
Greater than 15	20

- v. If the background soil pH is less than 6.5 (and the waste/soil mixture pH is not adjusted to 6.5 or greater while crops are grown), is the cumulative application of cadmium from waste less than 5.0 kg/ha?

f. Or, does the O/O perform or assure that all of the following actions occur:

- i. Is animal feed the only food chain crop produced? _____
- ii. Is the pH of the waste and soil mixture at the time of waste application or at the time the crop is planted, whichever occurs later, at 6.5 or greater? _____
- iii. Is a pH of 6.5 or greater in the waste and soil mixture maintained whenever food chain crops are grown? _____
- iv. Is there a facility operating plan which demonstrates how the animal feed will be distributed to prevent ingestion by humans? _____
- v. Does the facility operating plan describe the measures to be taken to safeguard against possible health hazards from cadmium entering the food chain, which may result from alternative land uses? _____
- vi. Is there a stipulation in the land record or property deed which states that the property has received waste at high cadmium application rates and that food chain crops must not be grown except in compliance with the actions described in f. i. through vi., above? _____

Comments: _____

Yes	No
-----	----

N/A

-

-

Are ignitable or reactive wastes ever placed in the landfill?

a. Treat, render, or mix the wastes before or immediately after placement in the landfill so that the wastes are not ignitable or reactive (by

WAC -090(5) and (7)), and so that the treating or mixing complies with WAC -395(1)(b)? (Note-- If O/O conducts this activity, be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire.)

b. Or else, for ignitable wastes only:

- i. Landfill the wastes only in nonleaking containers?
- ii. Dispose the wastes in such a way that they are protected from materials and conditions (e.g., heat, sparks, rupture) that may cause the wastes to ignite?
- iii. Cover the wastes daily with soil or other noncombustible material to minimize ignition potential?
- iv. Prevent disposal of the wastes in cells that contain or will contain other wastes which may generate heat sufficient to cause ignition of the wastes?

Describe which landfill cells (if any) receive ignitable or reactive wastes.

C. Incompatible wastes (265.313).

Are incompatible wastes or incompatible wastes and materials ever placed in the same landfill cell?

If "Yes":

- a. Does the O/O do this in a manner that assures compliance with WAC -395(1)(b)? (Note--Be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire.)

-
-
-
-
-

a. Does the O/O ever receive (or generate, if disposing of his own wastes) bulk or noncontainerized liquid wastes for disposal in his landfill?

i. Solidified or chemically fixed to be a solid prior to disposal?

- b. Does the O/O ever landfill containers which hold free liquids?

i. Very small, such as an ampule?

- E. Containers and labpacks (265.315 and 316).

-

- b. Does the O/O place overpacked drums (labpacks) in the landfill?

If "Yes," does the O/O observe the following requirements:

- i. Are all inside containers sealed tightly, nonleaking, and made of materials that will not react with or be ignited or decomposed by the wastes they contain?
- ii. If DOT regulations (49 CFR Parts 173, 178, and 179) specify particular inside containers for the wastes, are these regulations followed?
- iii. Are the inside containers overpacked in an open head DOT specification metal shipping container (49 CFR Parts 178 and 179) of no more than 110 gallons (416 liters) capacity?
- iv. Is the overpack container filled with absorbent material sufficient to absorb the liquid contents of all inside containers and to completely fill the overpack container (i.e., no partially full overpack containers may be landfilled; extra space must be filled with absorbent)?
- v. Are the absorbent materials used not capable of reacting with or being ignited or decomposed by the contents of the inner containers?
- vi. Does the O/O assure that incompatible wastes are not enclosed in the same overpack container?
- vii. Are all reactive wastes, other than cyanide or sulfide bearing reactive wastes, treated or rendered nonreactive prior to overpacking?

Comments: _____

7. INCINERATORS (40 CFR PART 265 SUBPART O).

Yes No

A. Exemption from incinerator standards (265.340).

Does the O/O burn only the wastes described below, and has he documented, in writing, that the wastes would not reasonably be expected to contain any of the dangerous waste constituents listed in WAC 173-303-9905, and is this documentation retained at his facility?

N/A

- a. Wastes listed as dangerous solely because they are ignitable and/or corrosive, or wastes designated as dangerous solely because of the characteristics of ignitability and/or corrosivity; and
- b. Wastes listed as dangerous or designated by the characteristics as dangerous solely due to the reactivity characteristics of WAC 173-303-090 (7)(a)(i), (ii), (iii), (vi), (vii), or (viii), provided that these wastes are not burned when other dangerous wastes are present in the combustion zone.

If "Yes," then the O/O is exempt from all interim status incinerator requirements except 265.351, Closure. Complete only those questions under item C. Closure, below.

B. Operation (265.345 and 347(a)).

- a. During startup and shutdown of the incinerator, does the O/O assure that wastes are not fed to the incinerator unless steady state conditions of operation have been achieved (including steady state operating temperature and air flow)?
- b. Does the O/O immediately make appropriate corrections, either automatically or manually, to maintain steady state combustion conditions whenever necessary?

C. Closure (265.351).

At closure, will (or has) the O/O remove all wastes and waste residues from the incinerator (including but not limited to ash, scrubber waters, and scrubber sludges) and, if designated as dangerous wastes, manage them accordingly? (Note--This responsibility and measures for accomplishing associated actions must be specified in the O/O's closure plan.)

Comments: _____

8. THERMAL TREATMENT (40 CFR PART 265 SUBPART P).

Yes No

A. Operation (265.373 and 377(a)(1) and (2)).

- a. Unless his process is a noncontinuous (batch) thermal treatment process which requires a complete thermal cycle to treat discrete quantities, does the O/O bring his process to steady state (normal) conditions of operation using auxiliary fuel or other means prior to adding dangerous wastes?
- b. Does the O/O immediately make appropriate corrections, either automatically or manually, to:
 - i. Maintain steady state or other appropriate thermal treatment conditions whenever necessary?
 - ii. Return any visible air emissions to their normal appearance whenever changes in appearance occur?

B. Closure (265.381).

At closure, will (or has) the O/O remove all wastes and waste residues from the thermal treatment process and equipment (including but not limited to ash, scrubber waters and scrubber sludges) and, if designated as dangerous wastes, manage them accordingly? (Note--This responsibility and measures for accomplishing associated actions must be specified in the O/O's closure plan.)

C. Open burning of waste explosives (265.382).

- a. Does the O/O ever open burn or detonate waste explosives (e.g., military propellants, dynamite, fireworks) which cannot be safely disposed of through other modes of treatment? (Note--Open burning of any other types of dangerous wastes is prohibited.)
- b. If "Yes," does the O/O conduct such open burning or detonation in a manner that protects public health and the environment, and in accordance with the following table?

Pounds of waste explosives	Minimum distance of open burning/detonation to property of others
0 to 100	670 feet (204 m.)
101 to 1,000	1,250 feet (380 m.)
1,001 to 10,000	1,730 feet (530 m.)
10,001 to 30,000	2,260 feet (690 m.)

Comments: _____

9. CHEMICAL, PHYSICAL, AND BIOLOGICAL TREATMENT (40 CFR PART 265 SUBPART Q).

Yes No

A. Operation (265.401).

- a. Does the O/O assure that wastes or treatment reagents are not introduced to the treatment process or equipment if they could cause ruptures, leaks, corrosion, or other failures?

✓

Describe how the O/O makes these assurances:

By knowing what compounds
are not compatible with
tanks - also by checking
tanks annually for structure
capacity

- b. Where waste is continuously fed into the treatment process or equipment, is the equipment or process equipped with a means to stop the inflow (e.g., waste feed cutoff system, bypass system)?

✓

- c. When treating wastes, does the O/O assure that the treatment is conducted so as not to:

- i. Generate extreme heat or pressure, fire, or explosion or violent reaction?

✓

- ii. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment?

✓

- iii. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fires or explosions?

✓

- iv. Damage the structural integrity of the facility or device containing the wastes?

✓

- v. Through other like means, threaten human health or the environment?

✓

Describe how the O/O makes these assurances:

By knowing what is added
to each type of waste and
amounts of the additions
Most work is pH changing

B. Ignitable or reactive wastes (265.405).

If ignitable or reactive wastes are placed in a treatment process or equipment, does the O/O treat, render, or mix the wastes before or immediately after placement in the treatment process or equipment so that the wastes are not ignitable or reactive (by WAC -090(5) and (7)), and so that the treating or mixing complies with WAC -395(1)(b)? (Note--If O/O conducts this activity, be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire.)

Indicate which treatment units receive ignitable or reactive wastes:

C. Incompatible wastes (265.406).

Are incompatible wastes or incompatible wastes and materials ever placed in the same treatment process or equipment, or are wastes ever placed in unwashed treatment equipment which previously held incompatible wastes or materials?

If "Yes":

- a. Does the O/O do this in a manner that assures compliance with WAC -395(1)(b)? (Note--Be sure to complete section 10. of Part IV: General TSD Facility Requirements of this checklist/questionnaire.)

- b. Describe which treatment processes or equipment receive incompatible wastes and what those wastes are.

D. Closure (265.404).

At closure, will (or has) the O/O remove all wastes and waste residues from treatment processes or equipment, discharge control equipment, and discharge confinement structures and, if designated as dangerous wastes, manage them accordingly? (Note--This responsibility and measures for accomplishing associated actions must be specified in the O/O's closure plan.)



Comments: SEE ATTACHED closure plan

DANGEROUS WASTE COMPLIANCE CHECKLIST/QUESTIONNAIRE

CHAPTER 173-303 WAC

* * * * *

Part 6: Closure

This part of the checklist/questionnaire is applicable to all dangerous waste management facilities operating under interim status. Dangerous waste facilities may include containers, tanks, surface impoundments, waste piles, thermal treatment, chemical, physical and biological treatment, land treatment, incinerators, and landfills.

The abbreviation "O/O" is used frequently throughout this checklist/questionnaire and stands for the words "owner and/or operator."

The questions in the checklist have been written in a manner such that they can be answered either "Yes" or "No." However, the answers to some questions may require additional explanation. The space provided for comments at the end of each section may be used for explanations. If a question does not apply to a particular facility, simply write "NA" (not applicable) next to the question.

CLOSURE PLAN CHECKLIST

6.1. GENERAL FACILITY INFORMATION

Facility Name: Chemical Processors, Pier 9/ EPA/State I.D.: #WAD000812917
Inspectors Name: LAURENCE ASKE Date: January 16, 1986

Check the type(s) of unit operations that the O/O manages at his facility (refer to 6.3 for Unit Specific Requirements):

	<u>Page No.</u>
° Containers	13
° Tanks.	14
° Surface Impoundments	15
° Piles.	16
° Land Treatment	17
° Landfills.	18
° Incinerators	19
° Thermal Treatment.	20
° Chemical, physical and biological treatment.	21

YES NO

- A. Is there a WRITTEN CLOSURE PLAN kept at the facility? (40 CFR 261.112(a))
- B. Does the closure plan cover all areas and facilities that were ACTIVE as of 11/19/80?
- C. Does the closure plan include general information about the facility which would be helpful in reviewing the plan, including (Note: regulations do not presently require the inclusion of the following information. However, inclusion of this information will aid in the review of the plan.):

- a. facility size(s)
- b. facility type(s)
- c. descriptions of all on-site equipment
- d. topography
- e. waste characterization
- f. soil type
- g. description of surrounding land use
- h. surrounding population
- i. size of facility (acres)
- j. volume of impoundment
- k. type(s) of treatment/processing
- l. description of liner
- m. leachate collection system
- n. gas collection system
- o. dredging procedures/schedules, etc.
- p. incinerator specifications
- q. other (specify

Comments:

Comments: Item d & f - The facility is part of Pier 91 Port of Seattle

2. MAXIMUM EXTENT OF OPERATION (40 CFR 265.112(a)(1))

YES NO

- A. Does the plan identify the MAXIMUM EXTENT OF OPERATION which will be unclosed during the life of the facility? — ✓ —
- B. Is the MAXIMUM EXTENT OF OPERATION estimate exceeded by current operations? — —
- C. Does the MAXIMUM EXTENT OF OPERATION estimate include:
- a. the maximum area of landfill or land treatment ever containing wastes? — —
 - b. inactive areas open because of operating problems or contingencies? — —
 - c. maximum area of land ever used for land spreading? — —
 - d. the most extensive treatment required for land spreading? — —
 - e. the maximum area used for storage? — —

Explain each "NO" answer.

Comments: The plan does not have a section
labeled: "Maximum Extent of
operation."

3. PARTIAL CLOSURE (40 CFR 265.112(a))

- A. Does the plan identify the steps for PARTIAL CLOSURE, at any time during the intended operating life, of
- a. surface impoundments?
 - b. landfills?
 - c. tanks?
 - d. other (specify: _____)

IF NO PARTIAL CLOSURE PLAN, WRITE N/A AND SKIP TO SECTION 5.

- B. Does the PARTIAL CLOSURE Plan identify
- a. the size of areas partially closed
 - b. procedures for partial closure?
 - c. maintenance program?
 - d. frequency of partial closures?
 - e. source of cover materials?

N/A

— —
— —
— —
— —
— —
— —
— —
— —
— —
— —

- OR

- a. visual inspections?
- b. groundwater monitoring?
- c. maintaining cover?
- d. maintaining diversion structures?
- e. controlling erosion?
- f. maintaining vegetation?
- g. security requirements?
- h. leachate collection?
- i. gas collection?

- a. visual inspections?
- b. groundwater monitoring?
- c. maintaining the cover?
- d. maintaining diversion structures?
- e. controlling erosion
- f. maintaining vegetation?
- g. security requirements?
- h. leachate collection?
- i. gas collection?

-

G. If a schedule is included, does the SCHEDULE FOR PARTIAL CLOSURE include:

- a. date(s) of partial closure(s)?
- b. total time required for each partial closure?
- c. time required for key steps--

- i. waste removal?
- ii. waste stabilization?
- iii. waste treatment?
- iv. waste disposal?
- v. placement of cover?
- vi. vegetation?
- vii. decontamination?
- viii. other (specify:)

Comments:

4. MAXIMUM INVENTORY (40 CFR 265.112(a)(2))

- A. Is there an estimate of the MAXIMUM INVENTORY of wastes in storage or treatment at any time during the life of the facility? (Note: write NA for those cases where there is no storage or treatment prior to disposal.)

- B. Does the MAXIMUM INVENTORY estimate include the maximum amount of on-site wastes?

- a. requiring pre-treatment?
- b. requiring treatment?
- c. requiring disposal?

- C. Does the MAXIMUM INVENTORY estimate include the maximum amount of on-site:

- a. wastes in surface impoundments?
- b. wastes in partially-closed non-disposal surface impoundments?
- c. wastes in tanks?
- d. wastes in piles?
- e. wastes in drainage pits?
- f. wastes in containers?
- g. standing liquids?

C. Does the MAXIMUM INVENTORY estimate include the maximum amount of on-site:
(continued)

-
- Handwriting practice lines with a checkmark. The lines are horizontal and of varying lengths, with a checkmark drawn on the second line from the top.

✓
✓
✓
✓

Comments: _____

A. Does the plan clearly identify the STEPS TO CLOSE

-

- | | YES | NO |
|--|-------------------------------------|-------------------------------------|
| B. Do the STEPS TO CLOSE in the plan include: | | |
| a. removal of wastes? (40 CFR 265.113(a)) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. treatment of wastes? (40 CFR 265.113(a)) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. waste disposal? (40 CFR 265.113(a)) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. waste containment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e. cover? (40 CFR 265.310(b)) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f. decontamination of equipment and structures? (40 CFR 265.112(a)(3)) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g. groundwater monitoring? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h. closure certification? (40 CFR 265.115) | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| i. maintenance of leachate program? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| j. maintenance of gas collection program? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| k. security requirements? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| C. With respect to the REMOVAL, TREATMENT, OR DISPOSAL of waste, does the plan identify: | | |
| a. the source and type of materials and equipment needed? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. the amount of labor required? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. the capacity, number, and location of trenches or cells needed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. the area required for landspreading? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| D. Does the plan describe the DECONTAMINATION (40 CFR 265.112(a)(3); 265.114) of facility equipment and structures, including: | | |
| a. a list of equipment, containers, and structures requiring disposal or decontamination? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. decontamination procedures? <i>Not specific</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. method of treatment or disposal of residues? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d. testing program? <i>Not specific</i> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| E. With respect to MONITORING, does the closure plan describe: | | |
| a. details of the groundwater monitoring program during closure? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. soil testing and monitoring? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. maintenance of monitoring equipment during closure? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. other (specify: _____) | <input type="checkbox"/> | <input type="checkbox"/> |

F. With respect to CERTIFICATION of closure (40 CFR 265.115), does the closure plan describe scheduled or estimated number of inspections?

YES NO

— ☒

G. If a system for COLLECTING LEACHATE is present, does the closure plan:

- a. describe leachate removal, treatment, and disposal during closure?
- b. identify the approximate volume of leachate collected?
- c. provide for maintenance of the leachate collection system during closure?

N/A
— } —
— } —

H. If a GAS COLLECTION SYSTEM is required during operation, does the closure plan?

- a. describe procedures for collecting gas during closure?
- b. describe monitoring samples and analysis during closure?
- c. describe maintenance of gas collection system during closure?

N/A
— } —
— } —

I. If SECURITY (ex: fencing) is required, does the closure plan:

- a. describe the maintenance of security equipment during the closure period?
- b. describe the installation of appropriate equipment at closure?
- c. state the dimensions of the fence and the area to be enclosed?

N/A
— } —
— } —

Comments: Item I - is provided by the
port of Seattle.

6. FINAL CLOSURE: SCHEDULE

A. Does the plan identify the YEAR when final closure is expected to occur? (40 CFR 265.112(a)(4))

— ☒

° What is the expected year of closure?

YES NO

B. Is there a SCHEDULE for final closure activities? (40 CFR 265.112(a)(4))

IF "NO" SKIP TO COMMENTS SECTION.

C. Does the SCHEDULE for final closure include (Note: regulations require the closure schedules to include, at a minimum, both the total time required to close the facility as well as the time required for intervening activities.):

- a. date closure is expected to begin?
(40 CFR 265.112(a)(1))
- b. total time required to close?
- c. the time for intervening closure activities? (40 CFR 265.112(a)(4))
- d. time required for key steps:

- i. waste inventory treatment?
(40 CFR 265.112(a)(4))
- ii. waste inventory disposal?
(40 CFR 265.112(a)(4))
- iii. removal of waste inventory
and residues?
- iv. decontamination of facility
equipment and structures?
- v. installation of containment
and diversion structures?
- vi. placement of final cover?
(40 CFR 265.112(a)(4))
- vii. planting vegetation?
- viii. closure certification?
- ix. other (specify:

D. Does the SCHEDULE for final closure:

- a. encompass more than 90 days for treatment, removal, or disposal of hazardous wastes after receipt of final volume of wastes?
(40 CFR 265.113(a))
- b. encompass more than 180 days for completion of closure plan activities after receipt of final volume of wastes?
(40 CFR 265.113(b))

Comments:

Comments: The plan does not specifically describe decontamination procedures.

7. GENERAL CLOSURE COST ESTIMATE

YES NO

A. Is there a written closure cost estimate?

☒ ☐

B. What is the amount of the closure cost estimate?

\$134,684.28

C. Is there documentation supporting the cost estimate?

☐ ☒

a. work-ups?

☐ ☐

b. contractor bids?

☐ ☐

c. operating history?

☐ ☐

d. other _____

☐ ☐

D. Has the cost estimate been adjusted by the 9% inflation factor?
(40 CFR 265.142(b))

☐ ☒

E. Does the cost estimate cover all the activities in the closure plan including costs of labor?

☒ ☐

F. Does the closure cost estimate cover all required closure activities?
(40 CFR 265.142(a))

☒ ☐

If "NO" specify in comments below:

Comments: _____

6.3 UNIT SPECIFIC REQUIREMENTS

This section addresses requirements which are specific to individual TSD units. In an effort to simplify the checklist, the requirements in this section have been organized into unit specific modules. This enables the inspector to select only those requirements which are specific to the particular facility under investigation.

Please note that with respect to surface impoundments, waste piles and land treatment units, if if O/O either cannot or elects not to remove all waste residues, contaminated soils, structures, and equipment, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills.

1. CONTAINERS

YES NO

A. Does the closure plan describe the following:

- a. the procedure for removing hazardous waste containers from the facility;
- b. inspection of waste containers for leaks;
- c. the procedure for transferring dangerous wastes from leaking containers to non-leaking containers;

☒ ☐

☐ ☒

☐ ☒

B. Have provisions been made for the decontamination of equipment and structures?

☐ ☒
Not clear or adequate.

C. Does the plan describe the testing program needed to judge the success of the decontamination efforts?

☐ ☒
Not adequately

D. Does the testing program include:

- a. sampling methods
- b. testing parameters
- c. analytical procedures

In general!
Not specific
☐ ☐
☐ ☐
☐ ☐

Comments: The plan talks in general terms.
What is require are specifics.

2. TANKS (40 CFR 265.197)

YES NO

A. Does the closure plan describe procedures for removing hazardous wastes from the tank?

☒ ☐

B. Does the plan describe procedures for decontaminating the tank, discharge control equipment, and discharge confinement structures?

☒ ☐

C. Have criteria been established to determine the effectiveness of the decontamination process?

☐ ☒

D. Have test procedures been included to determine the effectiveness of the decontamination procedures?

*In general,
Not specific*

E. Does the testing procedure include:

- a. sampling methods
- b. testing parameters
- c. analytical procedures

*In general,
Not specific*

☐ ☐
☐ ☐
☐ ☐

Comments:

The plan is in general terms
how tanks will be cleaned, should
be more specific.

3. SURFACE IMPOUNDMENTS (40 CFR 265.228)

YES NO

N/A

A. Upon closure, does the O/O plan to remove the impoundment:

a. standing liquids

b. waste and waste residue

c. underlying and surrounding contaminated soil

— —
— —
— —

B. Does the closure plan provide a detailed plan for the removal of:

a. all hazardous wastes

b. the containment system
(if applicable)

c. contaminated soil

— —
— —
— —

C. Does the closure plan describe a testing program to determine if the site is clean?

— —

D. Does the closure plan provide an estimate of each quantity of material to be removed from the site?

— —

Comments:

4. WASTE PILES (40 CFR 265.258(a))

YES NO

N/A

A. Does the closure plan provide a detailed plan for the removal of:

- a. all hazardous wastes
- b. the contaminated system
(if applicable)
- c. contaminated soil

— —
— —
— —

B. Does the closure plan describe the procedures to be used to decontaminate equipment and structures?

— —

C. Have criteria been established to judge the effectiveness of the decontamination procedures?

— —

D. Does the closure plan describe a testing program to determine if the site is clean?

— —

Comments:

3. SURFACE IMPOUNDMENTS (40 CFR 265.228)

YES NO

N/A

A. Upon closure, does the O/O plan to remove the impoundment:

- a. standing liquids
- b. waste and waste residue
- c. underlying and surrounding contaminated soil

— —
— —
— —

B. Does the closure plan provide a detailed plan for the removal of:

- a. all hazardous wastes
- b. the containment system (if applicable)
- c. contaminated soil

— —
— —
— —

C. Does the closure plan describe a testing program to determine if the site is clean?

— —

D. Does the closure plan provide an estimate of each quantity of material to be removed from the site?

— —

Comments:

4. WASTE PILES (40 CFR 265.258(a))

YES NO

N/A

A. Does the closure plan provide a detailed plan for the removal of:

- a. all hazardous wastes
- b. the contaminated system
(if applicable)
- c. contaminated soil

— —

— —

— —

B. Does the closure plan describe the procedures to be used to decontaminate equipment and structures?

— —

C. Have criteria been established to judge the effectiveness of the decontamination procedures?

— —

D. Does the closure plan describe a testing program to determine if the site is clean?

— —

Comments:

5. LAND TREATMENT (40 CFR 265.280)

YES NO

N/A

A. Does the closure plan address the following objectives and explain how they will be achieved?

- a. control of migration of hazardous wastes and constituents into groundwater.
- b. control of the release of contaminated run-off into surface water.
- c. control of the release of airborne particulate contaminants caused by wind erosion.
- d. protection of food chain crops.

— —

— —

— —

— —

B. Does the closure plan include at least a narrative statement indicating that the following factors were considered in addressing the closure objectives?

- a. type and amount of waste.
- b. mobility and rate of migration
- c. site location, topography, and surrounding land use.
- d. climate, including precipitation.
- e. characteristics of the cover, including material, final surface contour, thickness, porosity, permeability, slope, vegetation.
- f. geological and soil profiles and surface and subsurface hydrology.
- g. unsaturated zone monitoring.
- h. type, concentration, and depth of hazardous constituent migration as compared to background concentrations.

— —

— —

— —

— —

— —

— —

— —

— —

Comments:

6. LAND DISPOSAL (40 CFR 265.310)

YES NO

A. Does the closure plan address the following objectives and explain how they will be achieved?

- a. control of pollution migration from the facility via groundwater, surface water, and air.
- b. control of surface water infiltration, including prevention of pooling.
- c. prevention of erosion.

— —

— —

B. Does the closure plan include at least a narrative statement indicating that the following factors were considered in addressing the closure objectives?

— —

- a. type and amount of waste
- b. mobility and rate of migration
- c. site location, topography, and surrounding land
- d. climate, including amount, frequency and pH of precipitation
- e. characteristics of the cover, including material type, final surface contour, thickness, porosity, permeability, slope, and type of vegetation
- f. geologic characteristics, soil profiles, and surface and sub-surface hydrology
- g. unsaturated zone monitoring
- h. type, concentration, and depth of hazardous constituent migration as compared to background concentrations

— —

— —

— —

— —

— —

— —

— —

— —

— —

— —

Comments: _____

7. INCINERATORS (40 CFR 265.351)

YES NO

A. Does the closure plan address the removal of:

a. all wastes

b. ash

c. scrubber waters

d. scrubber sludges

B. Are procedures for decontaminating the incinerator, ash collection equipment, and emission control equipment, described or referenced in the closure plan?

C. Does the closure plan address the disposal of all contaminated equipment, residues, solvents, and contaminated cleaning agents?

D. Has the plan included criteria to be used to judge the success of the decontamination efforts?

E. Does the closure plan describe a testing program to determine if the standards of decontamination has been met?

Comments:

8. THERMAL TREATMENT (40 CFR 265.381)

YES NO

- A. Does the closure plan address the disposal of all wastes and residues?
- B. Does the closure plan describe the procedure for decontamination of the thermal treatment equipment and surrounding structures?
- C. Does the closure plan describe a testing program to determine if the standard of decontamination has been met?

— —

— —

— —

Comments:

9. CHEMICAL, PHYSICAL AND BIOLOGICAL TREATMENT
(40 CFR 265.404)

YES NO

A. Does the closure plan address the disposal of all wastes and residues?

☒ ☐

B. Does the closure plan describe the procedures for decontamination of the thermal treatment equipment and surrounding structures?

*In general,
Not specific*

C. Does the closure plan describe a testing program to determine if the standard of decontamination has been met?

*IN general,
Not specific*

Comments:

*The plan talks in general terms
It should be more specific.*

6.4 VERIFICATION OF CLOSURE COST ESTIMATES

Sections 1-7 deal with the verification of cost estimates for various tasks performed during the closure of a dangerous waste management facility. However, some of the information requested in the following sections may not be applicable to a particular facility. If an item does not apply, mark "NA" (not applicable) on the line located to the left of that item. If the requested information is applicable, simply place a " ✓ " on the line and enter the estimated figure on the line located to the right of the item. On the other hand, if the requested information is applicable and yet the facility has not provided an estimate for the particular item, enter "NP" (not provided) on the line in the right column.

Be sure that all estimates entered below are assigned the appropriate units (i.e., dollars, cubic meters, years, etc.).

1. TREATMENT, DISPOSAL OR REMOVAL OF INVENTORY
(40 CFR 265.112(a)(2))

Applicable/NA

A. On-Site

Amount/NP

- a. Amount of inventory and residues*
to be disposed on-site (yd³)
Gal + Bbl
i. from cost estimate
ii. from closure plan
iii. from visual inspection

56,177.25
56,177.25

- b. Unit cost for on-site treatment
or disposal (\$/yd³) gal
Bbl
i. from cost estimate

- c. Total cost of on-site treatment
disposal (\$)

- i. from cost estimate

B. Off-Site

- a. Amount of inventory and residues
to be disposed off-site (yd³)
i. from cost estimate
ii. from closure plan
iii. from visual inspection

- b. Unit cost for off-site treatment
or disposal (\$/yd³)

- i. from cost estimate

- c. Total cost for off-site disposal
excluding transportation

- i. from cost estimate

- d. Unit cost for transport of
inventory (\$/yd³/mile)

- i. from cost estimate

*Residues here refer to residues existing at initiation of closure.

Applicable/NA

Amount/NP

e. Transport distance (miles)

- i. from cost estimate
- ii. by map reference

f. Cost of transport (\$)

- i. from cost estimate

g. Cost of off-site treatment or disposal including transport (\$)

- i. from cost estimate
- ii. inspector calculation

C. Total cost of Treating, Disposing or Removing Inventory (\$)

a. From cost estimate

Comments: SEE ATTACHED Closure Plan.
Costs - Units are Gallons and
Bbls \equiv 55-Gallons Drum

Applicable/NA

Amount/NP

2. DECONTAMINATION

A. Soil Excavation (40 CFR 265.280(c)(1))

a. Volume of soil to be removed (yd³)

- i. from cost estimate
- ii. from closure plan
- iii. inspector's estimate

b. Unit cost for soil excavation (\$/yd³)

- i. from cost estimate

c. Total cost of contaminated soil excavation (\$)

- i. from cost estimate

B. Wastewater Removal

a. Volume of wastewater to be removed
(yd³) Gallons

- i. from cost estimate
- ii. from closure plan
- iii. inspector's estimate

b. Unit cost for wastewater removal (\$/yd³) \$/gallon

- i. from cost estimate

c. Total cost of wastewater removal (\$)

- i. from cost estimate

C. On-Site Treatment or Disposal of Contaminated Soil, Wastewater and Residues Generated During Decontamination

a. Volume of soil, wastewater and residues to be treated/disposed on-site (yd³)

- i. from cost estimate
- ii. from closure plan
- iii. inspector's estimate

SEE Part B.

SEE Closure Plan.

48,758
48,758

✓ 2.10

✓ 56,177.25

NA
NA
NA

NA

NA

A
A
NA

Applicable/NA

Amount/NP

b. Unit cost for treatment/disposal
(\$/yd³)

1. from cost estimate

c. Cost of on-site treatment/disposal
(\$)

1. from cost estimate

D. Off-Site Treatment or Disposal of
Contaminated Soil, Wastewater and
Residues Generated During
Decontamination

a. Volume of soil, wastewater and
residues to be treated/disposal
off-site (yd³)

i. from cost estimate

ii. from closure plan

iii. from visual inspection

b. Unit cost for off-site
treatment/disposal (\$/yd³)

i. from cost estimate

c. Cost of off-site treatment/
disposal (\$) excluding
transportation

i. from cost estimate

d. Unit cost for transport
(\$/yd³/mile)

i. from cost estimate

e. Transport distance (miles)

i. from cost estimate

ii. by map reference

f. Cost of transport (\$)

i. from cost estimate

g. Total cost of off-site
treatment or disposal
including transport (\$)

i. from cost estimate

Applicable/NA

Amount/NP

E. Equipment Decontamination
(40 CFR 265.112(a)(3))

a. Amount of equipment to be
decontaminated (tons)

- i. from cost estimate
- ii. from closure plan
- iii. inspector's estimate

b. Unit cost for equipment
decontamination (\$/ton)

- i. from cost estimate

c. Cost of equipment decontam-
ination (\$)

- i. from cost estimate

F. Total Cost of Decontamination (\$)

- a. From cost estimate

Comments:

The cost estimates are general
Not broken down into parts. See closure plan.
The facility is working on a updated closure plan
using this check list.

Applicable/NA

Amount/NP

3. CERTIFICATION

A. Professional Engineer Hours (hrs)
(40 CFR 265.115)

Amount/NP

- a. from cost estimate
- b. from closure plan
- c. inspector's estimate

B. Unit Cost* for Professional
Engineer* (\$/hr.)

- a. from cost estimate

C. Total Certification Cost (\$)

- a. from cost estimate

\$4,000.00

Comments:

The certification is in general

Terms - not broken down into parts -

* Loaded with costs for support personnel.

Applicable/NA

Amount/NP

4. VERIFICATION OF COST ESTIMATE FOR COVER

A. Cover Material**

(40 CFR 265.112(a)(4);
265.280(c)(2))

- a. Area to be covered (yd²)
 - i. from cost estimate
 - ii. from closure plan
 - iii. from visual inspection
- b. Depth of cover material (yd)
 - i. from cost estimate
 - ii. from closure plan
 - iii. inspector's estimate
- c. Volume of material to be obtained on-site (yd³)
 - i. from cost estimate
 - ii. from closure plan
 - iii. inspector's estimate
- d. Volume of material to be obtained off-site (yd³)
 - i. from cost estimate
 - ii. from closure plan
 - iii. inspector's estimate
- e. Unit cost of excavating material on-site (\$/yd³)
 - i. from cost estimate
- f. Unit cost of purchasing material off-site (\$/yd³)
 - i. from cost estimate
- g. Unit cost of transporting material (\$/yd³/mile)
 - i. from cost estimate
 - ii. by map reference

** Include materials to be used for cover, for example gravel or clay, except for top-soil.

Applicable/NA

Amount/NP

KA

h. Transport distance (miles)

- i. from cost estimate
- ii. by map reference

i. Transport cost (\$)

- i. from cost estimate

j. Total cost of acquiring material (\$)

- i. from cost estimate

k. Unit cost of spreading and compacting material (\$/yd³)

- i. from cost estimate

l. Cost of spreading and compacting material (\$)

- i. from cost estimate

m. Total cost of acquiring and placing material (\$)

- i. from cost estimate

B. Top-Soil

a. Area to be covered (yd³)

- i. from cost estimate
- ii. from closure plan
- iii. inspector's estimate

b. Depth of top-soil, allowing for appropriate grading (yd)

- i. from cost estimate
- ii. from closure plan
- iii. inspector's estimate

c. Volume of top-soil to be obtained on-site (yd³)

- i. from cost estimate
- ii. from closure plan
- iii. inspector's estimate

Applicable/NA

Amount/NP

NA

- d. Volume of top-soil obtained off-site (yd^3)
 - i. from cost estimate
 - ii. from closure plan
 - iii. inspector's estimate
- e. Unit cost of excavating top-soil on site ($\$/\text{yd}^3$)
 - i. from cost estimate
- f. Unit cost of purchasing top-soil off-site ($\$/\text{yd}^3$)
 - i. from cost estimate
- g. Unit cost of transporting top-soil off-site ($\$/\text{yd}^3$)
 - i. from cost estimate
- h. Transport distance (miles)
 - i. from cost estimate
 - ii. by map reference
- i. Transport cost ($\$$)
 - i. from cost estimate
- j. Total cost of acquiring top-soil ($\$$)
 - i. from cost estimate
- k. Unit cost of spreading and compacting top-soil ($\$/\text{yd}^3$)
 - i. from cost estimate
- l. Cost of spreading and compacting top-soil ($\$$)
 - i. from cost estimate
- m. Total cost of acquiring and placing top-soil ($\$$)
 - i. from cost estimate

Applicable/NA

Amount/NP

C. Synthetic Liner and Buffer Material

a. Area to be covered (yd²)

- i. from cost estimate
- ii. from closure plan
- iii. visual estimate

b. Depth of sand* buffer (yd)

- i. from cost estimate
- ii. from closure plan
- iii. inspector's estimate

c. Volume of sand to be obtained on-site (yd³)

- i. from cost estimate
- ii. from closure plan
- iii. inspector's estimate

d. Volume of sand to be obtained off-site (yd³)

- i. from cost estimate
- ii. from closure plan
- iii. inspector's estimate

e. Unit cost of excavating sand on-site (\$/yd³)

- i. from cost estimate

f. Unit cost of purchasing sand off-site (\$/yd³)

- i. from cost estimate

g. Unit cost of transporting sand (\$/yd³/mile)

- i. from cost estimate

h. Transport distance (miles)

- i. from cost estimate
- ii. by map reference

* Includes other materials (other than clay and top-soil) which may be used along with the synthetic liner.

Applicable/NA

Amount/NP

NA

- i. Total cost of acquiring sand (\$)
 - i. from cost estimate
- j. Unit cost of spreading and compacting sand (\$/yd³)
 - i. from cost estimate
- k. Cost of spreading and compacting sand (\$)
 - i. from cost estimate
- l. Total cost of acquiring and placing sand (\$)
 - i. from cost estimate
- m. Unit cost of acquiring and installing synthetic liner (\$)
 - i. from cost estimate
- n. Cost of acquiring and installing synthetic liner (\$)
 - i. from cost estimate
- o. Unit cost of acquiring and installing synthetic liner and buffer materials (\$/yd²)
 - i. from cost estimate
- p. Total cost of acquiring and installing synthetic liner and buffer materials (\$)
 - i. from cost estimate
- D. Total Cover Cost
 - a. Unit cost of cover (\$/yd²)
 - i. from cost estimate
 - b. Total cost of cover (\$)
 - i. from cost estimate

Applicable/NA

Amount/NP

Comments:

Applicable/NA

Amount/NP

N/A

5. REVEGETATION (40 CFR 265.280(c)(2)(11))

A. Area in Need of revegetation (yd²)

- a. From cost estimate
- b. From closure plan
- c. From visual inspection

B. Unit Cost for Acquiring and Placing Seed, Fertilizer, etc. (\$/yd²)

- a. From cost estimate

C. Total Cost of Acquiring and Placing Seed, Fertilizer, etc. (\$)

- a. From cost estimate

6. OTHER (from cost estimate) (\$)

(specify)

(specify)

7. TOTAL CLOSURE COSTS (\$)

- A. From cost estimate

NARRATIVE INSPECTION REPORT

Resource Conservation and Recovery Act (RCRA) Chapter 173-303 Washington Administration Code (WAC) **Compliance Inspection**

Facility: Chemical Processors, Inc.
Pier 91 facility
5501 Airport Way South
Seattle, Washington 98108

Date of Inspection: January 16, 1986

ID Number: WAD000812917

Inspectors: Laurence Ashley
Dan Cargill

Purpose: This inspection was intended to supply information concerning compliance with applicable hazardous waste and water quality requirements under WAC 173-303 and Revised Code of Washington (RCW) 90.48.

General Facility and Process Information

From a revised Part A dated February 18, 1986 (Sent to the Port of Seattle for clearance): "Pier 91 is a waste oil reclamation facility. By utilizing tank treatment, reusable oil is reclaimed by separating the impurities. Liquid wastes containing low concentrations of heavy metals and/or low concentrations of hazardous wastes are treated to remove the contaminants or render the liquids non-hazardous. Pier 91 is a storage, blending and marketing facility of used oil fuel and hazardous waste fuel."

Storage tank capacity: 9,036,090 gallons.

Treatment capacity: Tank: 40,000 gallons/day
Physical and chemical: 100,000 gallons/day

Wastes listed: K048, K049, K050, K051, K052, D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, F001, F002, F003, F030, W001, WT02.

Notification and Permitting

Notified on EPA Form 3510-1 (6-80) as a TSD dated November 14, 1980.

Revised Part A dated December 7, 1984.

Revised Part A dated May 30, 1985.

Revised Part A dated February 18, 1986.

Facility Inspection - Opening Conference

Mr. Cargill and I met with Mr. Dennis Stefani and Ms. Jeanne Van Wallendael and other staff members and a representative of The Boeing Company at the company's main office. We went over the purpose of the inspection and why Mr. Cargill was present and went over questions concerning procedure. I explained to Chemical Processors that they should submit a revised Closure Plan with a view of closing in the present month (WAC 173-303-610). They asked: "When is the Part B going to be called?" Mr. Cargill explained why he was present. He was looking at all facilities that are around Elliot Bay and Duwamish River. The Boeing representative was present because The Boeing Company wants to know if the facility is doing what is required. At the close of the meeting, we went over to Pier 91 and toured the facility.

Facility Inspection

See the Narrative Report for April 9, 1985.

The facility receives the rain runoff from the Pier as well as the generator deliveries. The Nissan auto company uses the Pier as an off-loading holding area.

Dan Cargill's letter to Chemical Processors is attached.

The facility is generating W001 waste. This is from the centrifuge and or belt press/filtration of the oil sludge from the tanks.

The company has been receiving WT02 waste which was not on current Notification or Part A forms (WAC 173-303-060).

The waste analysis plan needs some work to come into compliance (WAC 173-303-300).

R

ANDREA BEATTY RINKER
Director



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

4350 - 150th Ave. N.E. • Redmond, Washington 98052-5301 • (206) 885-1900

April 18, 1986

Chemical Processors
5501 Airport Way South
Seattle, Washington 98108

Attention: Mr. Ron West

Water Quality Inspections
Lucille Street; Pier 91

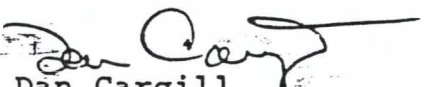
Dear Mr. West:

On January 16, 1986, I accompanied Laurence Ashley on his inspection of your facility at Pier 91. During the inspection I commented on the degree of soil contamination in the tank farm. I also noted that there was some exposed underground piping to the Pier that was being replaced. In discussing the history of the site, I was advised that you lease the property from the Port of Seattle and sub-lease part of the property and tanks to PANOCO. Based on my observations, I will be conducting an inspection of the tank farm with a representative of the Port to discuss the need for soil sampling and ground water monitoring.

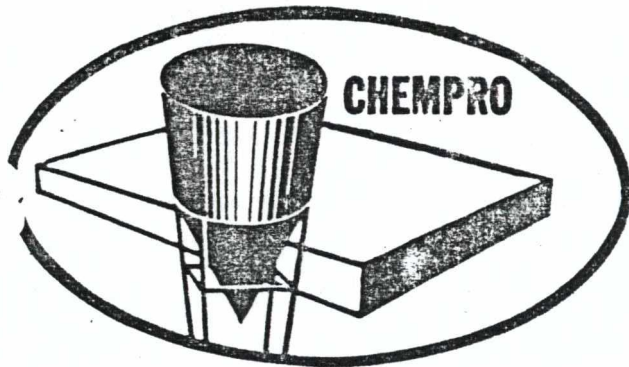
On January 30, 1986, I accompanied Laurence Ashley on his inspection of your Georgetown facility. While I did not have any concerns relating to water quality, I would be interested in observing the removal of the underground tanks. I would appreciate it if you would keep us advised of the schedule for their removal.

If you have any questions, please do not hesitate to call me at 885-1900.

Sincerely,


Dan Cargill
District Inspector
Environmental Quality

DC:gm



CHEMICAL PROCESSORS, INC.

5501 AIRPORT WAY SO.
SEATTLE, WASHINGTON 98108

PHONE: (206) 767-0350

PIER 91 CLOSURE PLAN

GENERAL INFORMATION

The Pier 91 Facility was formerly a U.S. Naval facility and is located on Puget Sound's northern waterfront adjacent to Elliott Bay.

The Pier 91 facility is located within approximately one quarter mile of Smith Cove and Smith Cove Waterway both part of Elliott Bay. Pier 91 is completely surrounded by Port of Seattle property. There are only outlying residential areas from the plant site.

Pier 91 has been developed into a prominent marine recycling terminal for large quantities of bilges and ballasts waters, both industrial and hazard classes, along with oil treating and recovery. The facility also serves as interim storage for reprocessed material that can be shipped either via truck, rail or barge. In addition, a portion of this 8,000,000 gallon complex is leased as a marine fuel depot by Pacific Northern Oil Company.

Pier 91's main function is waste oil reclamation. The maximum capacity of Chemical Processors operations at Pier 91 is 3.5 million gallons. Waste oil is rendered reusable by tank treatments such as separation of impurities and breaking emulsions. All the processed oil is currently sold to Pacific Northern oil Co. as cutting stock in marine oils. Pier 91 also treats liquid wastes contaminated with low level heavy metals and/or other low concentration hazardous wastes which can be treated to render the liquids non-hazardous.

The operation currently involves 6 to 10 employees operating through two shifts five days per week. This varies according to market conditions.

The waste is delivered to Pier 91 in tanker trucks and pumped into the tanks according to the site piping layout. This layout includes the loading area for transportation of materials off-site (see attached).

Storm or rain water suitable for discharge to Metro sewer system is collected by drains connected to the catchment basin. Storm waters are processed through the oil/water separator and then discharged directly to Metro sewers. An oil/water photocell monitoring device sounds an alarm if permitted levels of oil are exceeded.

Industrial wastewater leaving the plant is collected and treated on a batch basis. The batch container is sampled after each treatment, the samples are composited and analyzed for applicable pollutants.

The Pier 91 facility only discharges water which is within the limits of its Metro discharge permit.

The facility is required to have an Emergency Preparedness, Prevention and Contingency Plan, and a Spill, Prevention, Control and Countermeasures Plan. These plans were updated in 1984.

A closure cost estimate is attached. The closure cost estimate includes costs for a sampling procedure and analysis plan, if deemed necessary at the time of closing.

DECONTAMINATION OF THE FACILITY

The Pier 91 facility is monitored by multiple control procedures. There is a detailed waste analysis plan to control waste coming into the site. All the run-off water is collected, tested and treated (if necessary) prior to discharge. A discharge analysis is performed every month to insure all discharge waters meet the Metro discharge limits in the permit. These parameters allow accurate monitoring of site conditions, and insure the integrity of the site.

PIER 91 FACILITY CLOSURE COST ESTIMATE

FACILITY LOCATION: Pier 91
Seattle, WA 98119

DATE: 9-29-85

EPA I.D. NUMBER: WAD000812917

<u>Treatment</u>	<u>Quantity</u>	<u>Cost/Unit</u>	<u>Cost</u>
Emulsified Oil	19,100 Gal	\$0.10/Gal	\$ 1,910.00
Oil/Water Sludge Separator	48,758	\$2.10/Gal	\$102,385.00

<u>Disposal</u> Sludge	8,667 Bbls	\$24.75/Bbl	<u>\$214,508.25</u>
		Subtotal	\$318,803.25

<u>Reclamation</u> Oil	12,025 Bbls	\$21.84/Bbl	<<\$262,626.00>>
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<<Disposal & Treatment Costs
Minus Net Reclamation Sales>>

NET COST \$56,177.25

General Clean-Up*

9 Tanks	\$500.00 each	\$4,500.00
4 Tanks	\$250.00 each	\$1,000.00
5 Tanks	\$1,000.00 each	\$5,000.00
2 Tanks	\$2,500.00 each	<u>\$5,000.00</u>
	SUBTOTAL	\$15,500.00

<u>Labor</u>	<u>Quantity</u>	<u>Cost/Unit</u>	<u>Cost</u>
Cleanup	808 Manhours	\$11.00/Hour	\$8,888.00
Processing	1,625 Manhours	\$11.00/Hour	<u>\$17,875.00</u>
		Subtotal	\$26,763.00

Sampling Procedure & Analysis Plan		\$23,000.00
Professional Engineering Certification		<u>\$ 1,000.00</u>
	Subtotal	\$122,440.25
	Contingency at 10%	<u>\$ 12,244.03</u>
	Total	\$134,684.28

*Includes equipment rental necessary for clean-up operations.

SUMMARY

Since it is the intent of Chemical Processors, Inc. to operate the Pier 91 facility on a perpetual life basis, in that the processes and activities performed in this facility are of a nature that does not create an "end-life" to said facility, this closure plan is submitted with no fixed closure date. However, in the event that this facility should require closure, such action would be conducted in the following manner.

- 1) All materials on site shall be shipped to either a disposal facility or another reprocessing facility for disposition, utilizing the proper manifesting procedures required by RCRA and WAC 173-303.
- 2) Any hazardous residues remaining in the tanks shall be rinsed from the tanks and the rinsed material shall be disposed of in accordance with the applicable regulations.
- 3) The facility itself shall be converted to an alternate economic use.
- 4) Six months prior to closure, a definitive schedule would be submitted to the regional administrator as outlined in CFR 265.112(d).
- 5) One month prior to this date, the closure plan will be updated as to:
 - a) Scope of closure work
 - b) Contractor
 - c) Schedule with dates anticipated for phases of closure
 - d) Updated cost estimates for closure
 - e) If deemed necessary, a complete sampling procedure and analysis plan

PHOTO No. ONE

DATE: Jan 16, 1986

TIME: 0930

TAKEN BY:
L. Ashley

WITNESS:
ChemPro crew

FILM: ASA 100

CAMERA:
Sureshot

DESCRIPTION:

Main Discharging
area for incoming
shipments - Pier 91 - Chemical Processors, Inc. Facility.

COMMENTS:

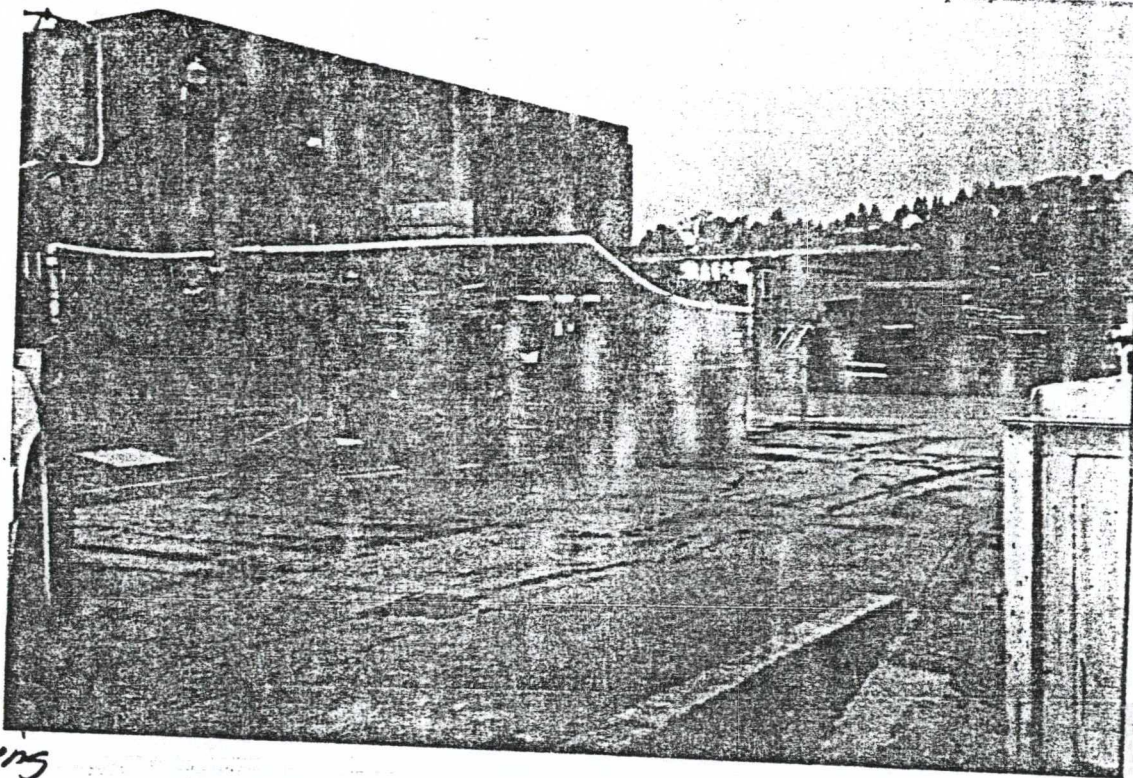


PHOTO No. Two

DATE: Jan 16, 1986

TIME: 0931

TAKEN BY:
L. Ashley

WITNESS:
ChemPro crew

FILM: ASA 100

CAMERA:
Sureshot

DESCRIPTION:

Central Pump
Station above
subsurface tank & wastewater discharge - unloading of bulk
shipments - Pier 91 - Chemical Processors, Inc. Facility

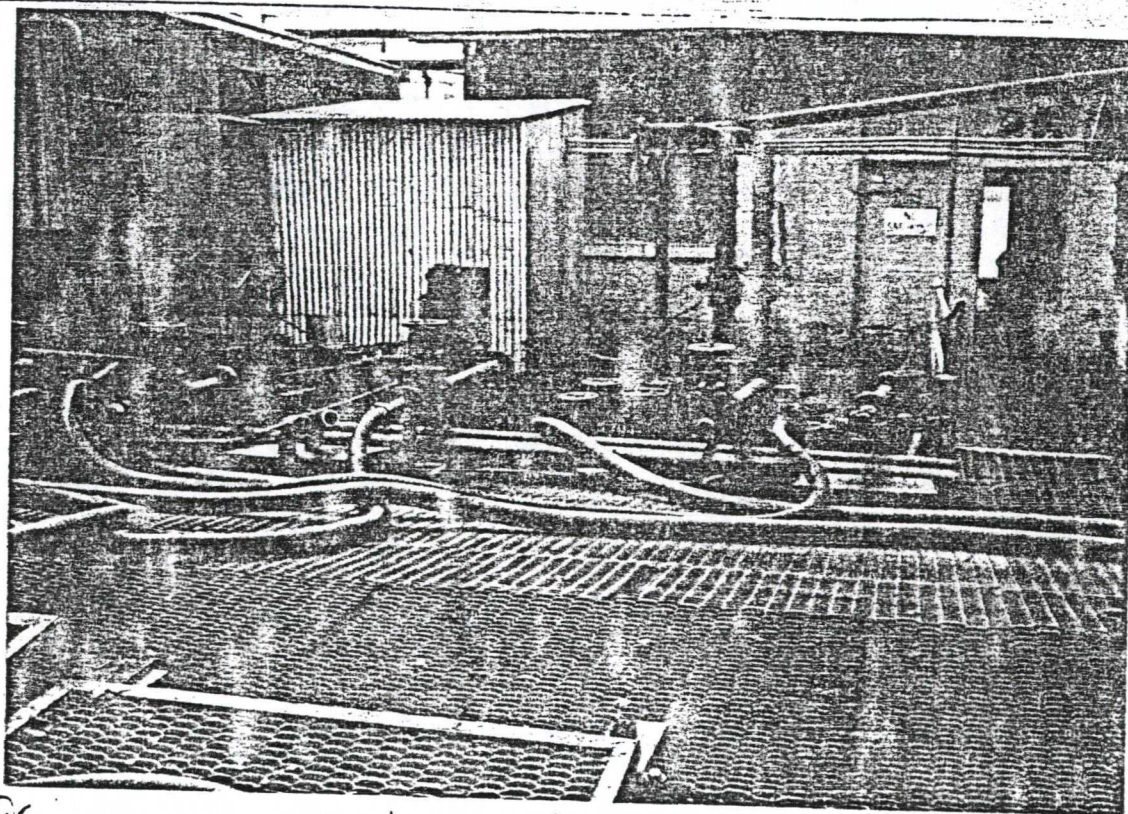


PHOTO No. Three

DATE: Jan 16, 1986

TIME: 0935

TAKEN BY: L. Ashley

WITNESS: ChemPro crew

FILM: ASA 100

CAMERA: Sureshot

DESCRIPTION:

Oil separator
unit at

Pier 91 facility for Chemical Processors, Inc.

COMMENTS:

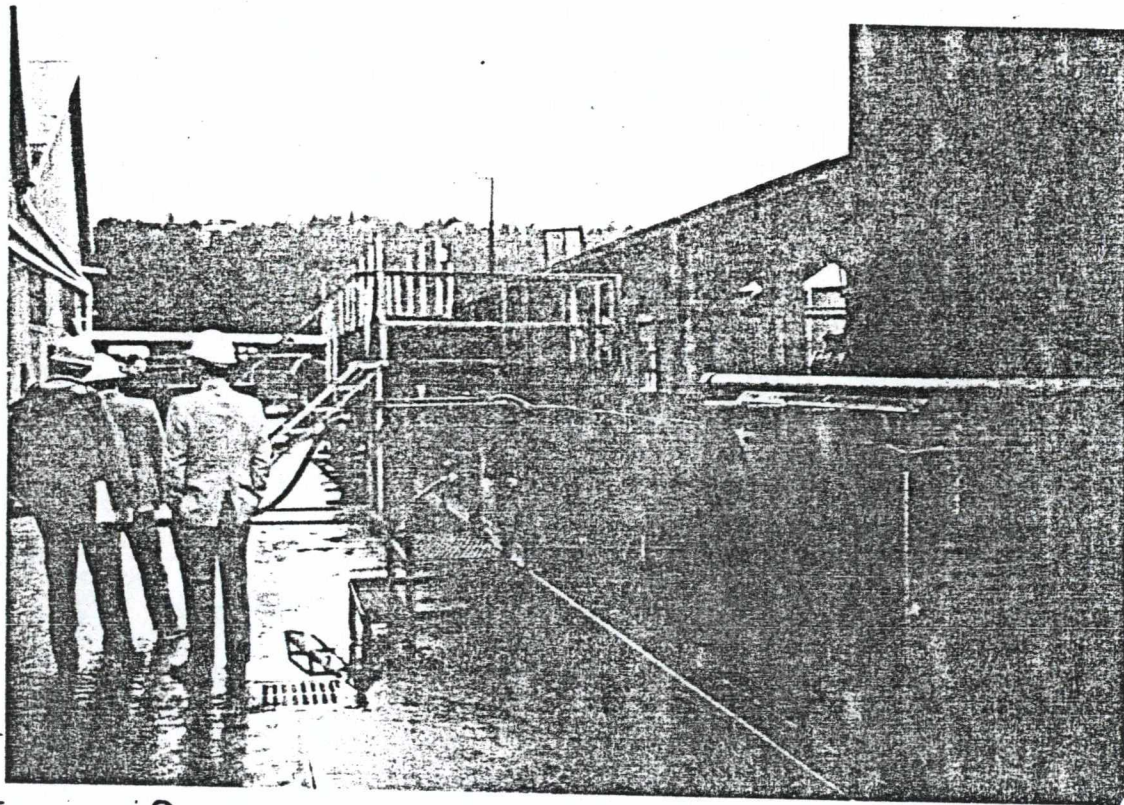


PHOTO No. Four

DATE: Jan 16, 1986

TIME: 0936

TAKEN BY: L. Ashley

WITNESS: ChemPro crew

FILM: ASA 100

CAMERA: Sureshot

DESCRIPTION:

oil separator
unit mid portion

Pier 91 facility / Chemical Processors, Inc.

COMMENTS:

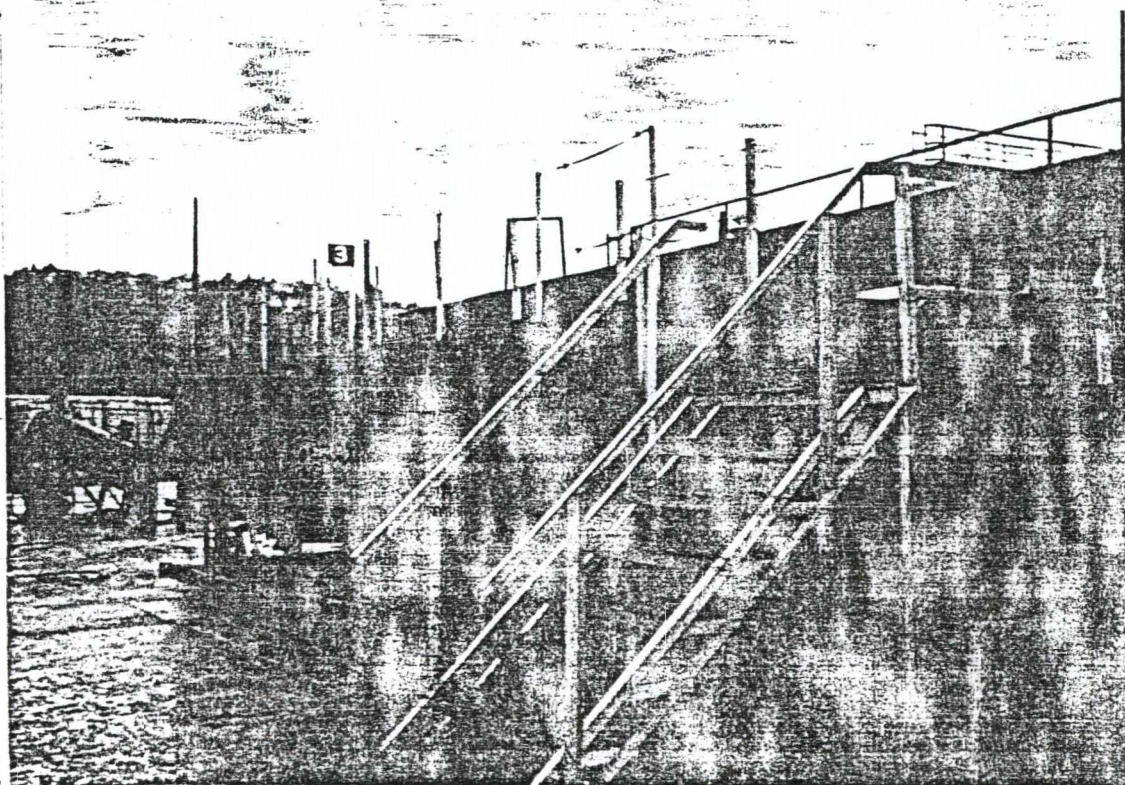


PHOTO No. Five

DATE: Jan 16, 1986

TIME: 0950

TAKEN BY:
L. Ashley

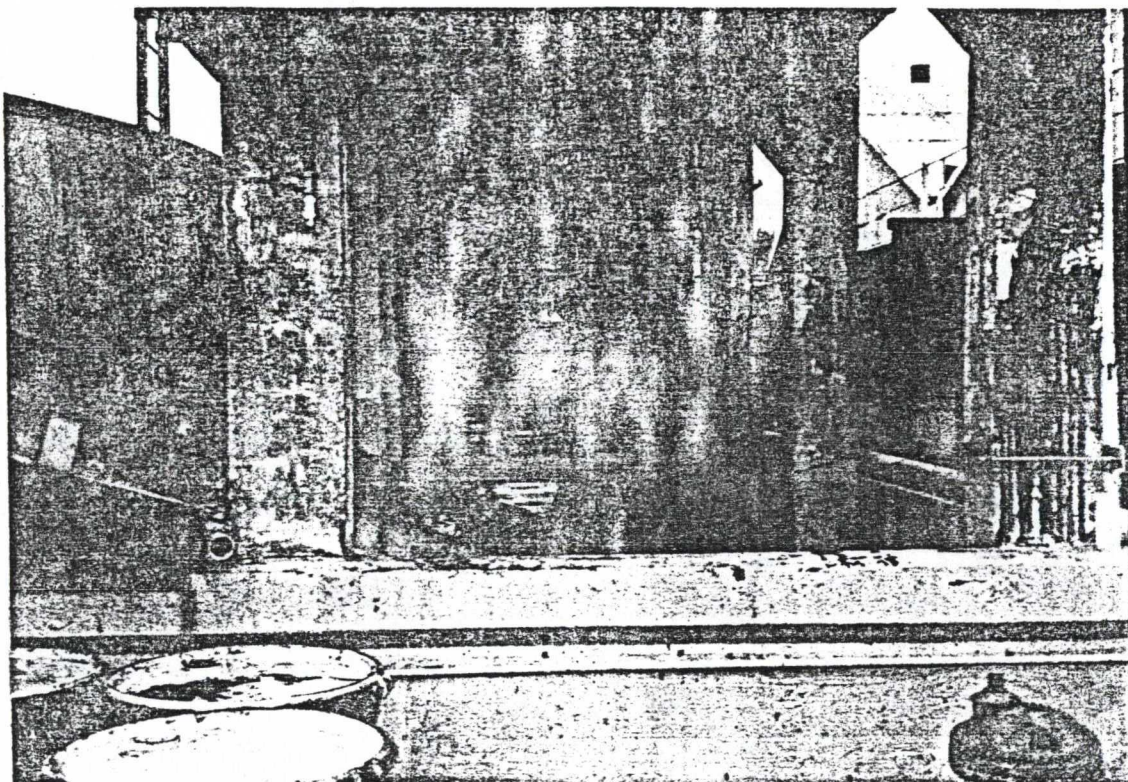
WITNESS:
ChemPro crew

FILM: ASA 100

CAMERA:
Sureshot

DESCRIPTION:

Centrifuge for
removing liquids
from oil sludge



COMMENTS: conveyor belt left ^{side} of picture - centrifuge - center
Pier 91 facility - Chemical Processors, Inc.

PHOTO No. SIX

DATE: Jan 16, 1986

TIME: 0951

TAKEN BY:
L. Ashley

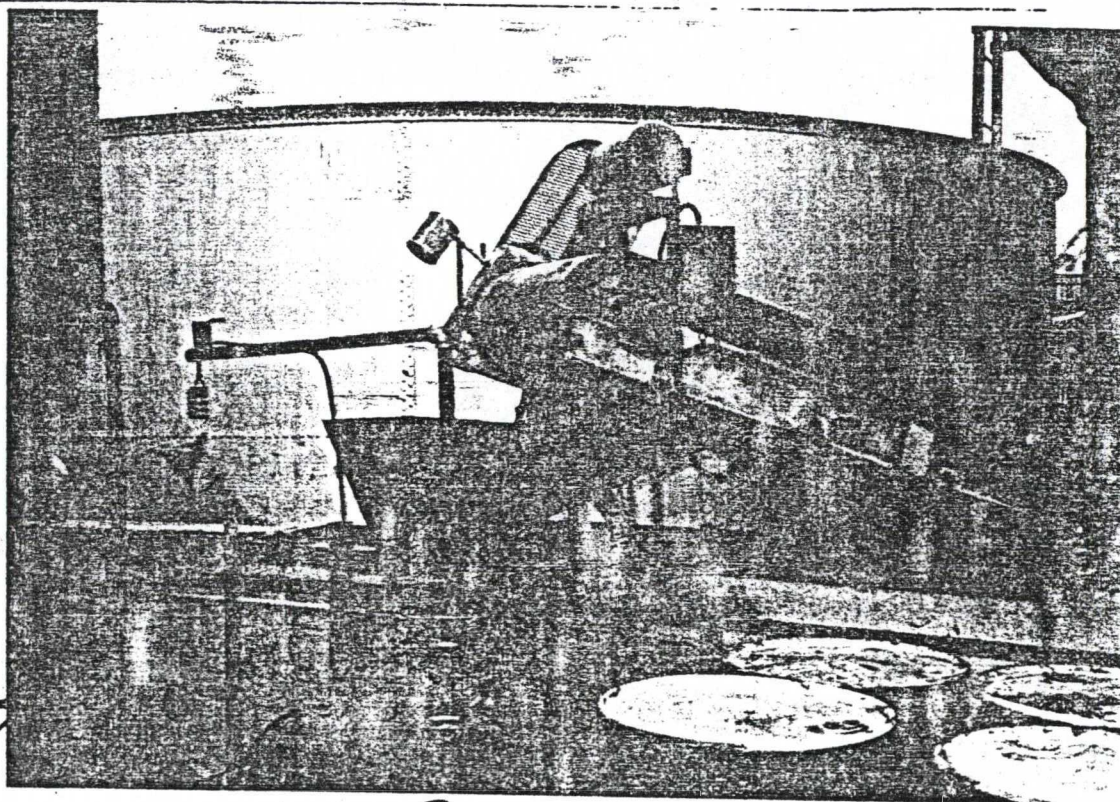
WITNESS:
ChemPro crew

FILM: ASA 100

CAMERA:
Sureshot

DESCRIPTION:

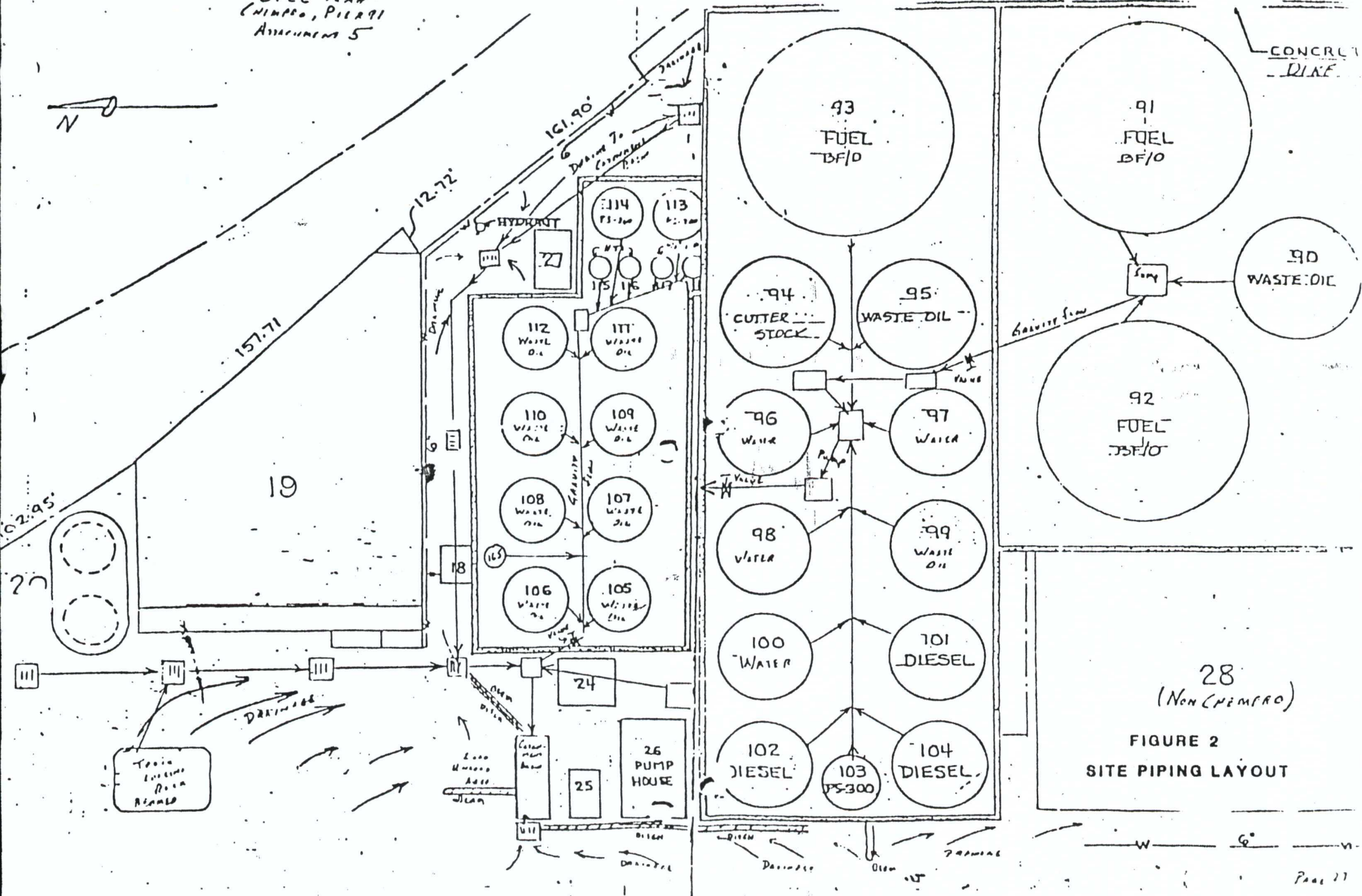
Drum loading
Area for oil



Sludge (w/ oil) conveyor belt from centrifuge at
COMMENTS: Pier 91 facility of Chemical Processors, Inc.

Note: tanks shown on map, but not listed on schedule ARE LEASED to others.

SPCC PLAN
CHIMPRO, PIER 91
Attachment 5



28
(Non Chempro)
FIGURE 2
SITE PIPING LAYOUT